#### **MIGRAINE SOLUTIONS**

## The Real and Scientific Treatment of Headache and Migraine with a New Approach

Neurologist Dr. Emel Gökmen

#### Neurologist Dr. Emel Gökmen

She was born in 1967 in Muğla. She graduated from Ege University Faculty of Medicine in 1990 and completed her speciality training in Faculty of Medicine, Department of Neurology at Istanbul University in 1999.

Having resigned from her position at the German Hospital in 2004, she started her studies in the field of integrative medicine. Gökmen began to question diagnosis and the medication cycle relevant to diagnosis and engaged in probing the causes of disease by working specifically on some diseases especially headaches and migraines from which she suffered a lot throughout her life. Combining the conventional medical training with integrative medicine (neural therapy, acupuncture, homeopathy, magnetic field therapy) trainings she had received, she developed 'Gökmen Approach' algorithm for treatment.

'Gökmen Approach' detects the causes of some diseases as migraine and headaches in particular and also waist- neck pain and hernia, dizziness, tinnitus, fibromyalgia, restless leg syndrome and provides the rehabilitation of these causes by using the combined methods of conventional medicine (classic medicine) and integrative medicine.

Specialized in the approach she developed in detecting the causes of diseases, Dr Gökmen's different and new approach provided solution for pain in many patients. Gökmen claimed that cluster headaches originated only from the problems in teeth-jaw complex and she confirmed her assertion by relieving the pain through resolving the problem in teeth-jaw complex.

Gökmen has one child and has taken on the task of working aimed at easing pain as a lifetime duty.

### 'Gökmen Approach' in the Treatment of Migraine and Headaches

As a consequence of her ten-year detailed and rigorous works on detecting and solving the causes of pain, Dr. Emel Gökmen constituted a method which she termed 'Gökmen Approach'. The results obtained from the ten-year research, work and treatment process of 5000 patients with migraine and headaches, clinically showed the success of this method. She defined the algorithm which includes detecting the causes of migraine and headaches and solving them, as 'Gökmen Approach in the Treatment of Migraine and Headaches'.

#### **How Has Gokmen Approach Been Formed?**

- 1. Neural Therapy Approach starts the first phase of the treatment algorithm.
  - Having determined that all migraine symptoms were related to autonomic nervous system dysfunction (work disruption), Gökmen abandoned the opinion of migraine being 'a brain disease'.
  - Based on 'interference fields sending negative stimulations to autonomic nervous system' definition of neural therapy approach, she reached the conclusion that migraine was totally a disease of interference field.
  - Within this period, as for migraine is an autonomic dysfunction, the idea that all migraineurs can be cured by neural therapy arose.
  - 2.Gökmen analysed the patient's complaints and features of pain very well and made the chart of disease and duration of disease in neural therapy approach. She applied neural therapy on the interference fields she detected this way.
    - Despite the positive results obtained in the treatment process, the approach could not be verified in some patients.
    - As a result, Gökmen experienced the fact that injections applied in neural therapy were not enough to treat all the areas in interference fields. She saw that interference fields

located in teeth-jaw complex can only be treated by working with dentists.

- Patients were referred to dentists at certain stages of treatment but the results of some treatments were not satisfactory. Thus, with the foresight that the big part of interference fields might be caused by inadequacy of dental treatment, the necessity to work with a specialist arose.
- After working with the specialists, Gökmen saw the necessity to manage the treatment.
- In the final stage, in order to manage the treatment, it was necessary to have enough level of dentistry.
- 3. Gökmen created certain categories of interference fields with the results obtained from 5000 patients she had treated.
  - For migraine, considering features of pain, patients' age and age of onset, she detected the migraine groups and interference fields for these groups.
  - For cluster headaches and trigeminal neuralgia, she concluded that these two diseases completely originated from teeth-jaw complex.

#### What is Gökmen Approach?

Gökmen Approach is a treatment algorithm which reveals the causes of headaches and migraine by evaluating with an approach different from the currently accepted approach and solves these causes with non-traditional methods.

- Gökmen Approach claims that "Migraine is a disease of interference field" by revealing migraine and headaches originate from interference fields in the body with clinical results. It is against the idea of last century that 'Migraine is a brain disease'.
- Seeing that migraine is caused by the autonomic nervous system dysfunction, it detects the reasons creating this dysfunction.
- Revealing the causes of each headache (primary headaches) with unknown cause in IHS (International Headache Society) classification, it reclassifies them according to their causes.

• It reveals that cluster headaches and trigeminal neuralgia are aches completely originated from teeth-jaw complex. It claims that for both diseases, the problems in teeth-jaw complex can be solved only by working with dentists who are specialists in their fields. It indicates that the cause of continuation of some patients' complaints despite receiving treatment is the lack of specialization.

#### How is the treatment with Gökmen Approach?

- In the first stage, the interference fields of the patient is detected. Treatments of neural therapy and teeth-jaw complex are used to treat interference fields.
- These treatments are carried out with a team. The doctor managing the treatment (neurologist, pain specialist or family doctor) should have knowledge in interference field approach and tooth-jaw complex. The other doctors of the team should consist of specialists in their fields (endodontist, restorative treatment specialist, periodontologist, gnathology and prosthetic specialists, maxillofacial surgery specialist)
- In order to apply Gökmen Approach, aforementioned doctors (neurologist, pain specialists, family doctors and even dentists) should receive basic training. Following the basic training, this approach can be applied in the treatment of migraine and headache. With increasing experience in time, the success of treatment also increases.

#### **Contents**

Presentation	
Preface	14
First Chapter: Understanding Migraine via Its Historical Development	18
Migraine Theories	
Formation of Migraine	
1 officiation of infigrance	23
Second Chapter: How Should the Treatment of Migraines and Headaches be?.	
Cause-oriented, side effect free treatment method	29
How should the approach to the patient be?	
What should be considered in the treatment process?	33
Advice to patients	36
Third Chapter: Understanding Migraine via Stories and Solutions	38
Understanding migraine Requires an 'Integrative Approach'	39
A Story of a Common Migraine (without aura)	
What is Common Migraine (without aura)? How is it treated?	
A Story of Migraine (Classical) with Aura Attacks	
What is a Migraine (classical) with Aura? How is it treated?	
What is Complicated Migraine? How is it treated?	
A Story of Silent Migraine	
What is Silent Migraine (aura withouth headache)? How should it be treated?	
A Story of Childhood Migraine	
What is Childhood Migraine? How should it be treated?	
What are the rare migraine types in children?	61
A Story of Migraine Accompanied by vomiting	
Are repetitive vomiting attacks in childhood actually migraines?	63
An Adolescent Migraine story in young girls	65
Adolescent Migraine and Treatment	66
A Story of Menstrual Migraine	68
Menstrual Migraine and the Treatment	70
A Migraine Story Beginning with Birth Control Pills	72
Migraine Beginning with Hormonal Medicine	74
A Story of Migraine in Pregnancy	
What to do if Migraine Attacks Continue in Pregnancy?	76
A Migraine Story beginning after a Cesarean Section	
Is there an Association between Migraine and Cesarean Section?	79
Migraine and Headache in the First Days of Postpartum	
A migraine story of a Nursing Mother	81
What to do for Migraine Attacks in Nursing Mothers?	
A Migraine Story of a Young Girl with early Menopausal Symptoms	83
Migraine and Early Menopause Treatment without Neural Therapy	85
Migraine Treatment During and After Menopause	
A Story of Advanced Age Migraine	
How to Approach Migraines Beginning at an Advanced Age?	
A Story of Chronic Migraine	
What is Chronic Migraine? How Should it be Treated?	93

A Story of Tension Headache	95
What are the Characteristics of Tension Headaches? How should it be treated?	96
The Relation of Cervicogenic (caused by the neck) with migraine and	
The Treatment	98
A story of Migraine Beginning with Dizziness	99
What are the Characteristics of Vestibular Migraine (Migraine with Dizziness)?	
How is it treated?	102
How is migraine pain differentiated from sinusitis?	104
What should be considered in the treatment?	
A story of Status Migrainosus	107
What are the Characteristics of Status Migrainosus?	
How should the treatment be?	108
A Weekend Migraine Story	
How to Cope with Migraines Occuring at the Weekends or in Happy Moments?	
Are Headaches Caused by Sexual Activity Dangerous?	
Are Migraine and Epilepsy Linked?	
A Story of a Severe Migraine Hindering the Ability to Leave the House	
Atypical migraine, migraine with autonomic dysfunction and the treatment	
Fourth Chapter: The Treatment of Headaches Caused by Tooth-Jaw Complex	X
(Cluster Headache, Trigeminal Neuralgia and Others)	118
How have the cause of cluster headaches and trigeminal neuralgia been resolved?	119
A Story of Typical Cluster Headache	123
What is Cluster Headache?	
How and Why does Cluster Headache Occur?	130
How is Cluster Headache Treated?	
A Story of Cluster Headache in Middle and Older Aged Males	136
The Characteristics of Cluster Headaches in Middle or Older Aged Males	137
A Story of Cluster Headaches in Females	139
The Characteristics of Cluster Headaches in Females	141
A story of Chronic Cluster Headache from the Onset	143
The Characteristics of Cluster Headaches with Chronic Onset	145
The Effect of Cortisone Use on Cluster Headache	146
The Role of Dental-Jaw Complex in Migraine	147
What is Trigeminal Neuralgia? How should the Treatment be?	149
An Approach to Cluster Headaches with the Features of Trigeminal Neuralgia	
An Approach to Trigeminal Neuralgia with the Features of Cluster Headaches	
Headaches with Prominent Vision Symptoms and The Treatment	
A Story of Migraine Attacks Caused by Jaw Joint Problems	158
Migraine Caused by Temporomandibular Joint (Jaw Joint) Problems and	
TeethClenching	159
What is Stabbing Headache? How is it treated?	161
Hypnic Headache, Headache Awakening Elderly People at Night and the Treatment	t 162
References	

My father suffered from cluster headache until the age of seventy.

This book is devoted to him whose presence I always feel.

8

#### **Presentation**

"Knowing is not enough; we must apply.
Willing is not enough; we must do."
Wolfgang von Goethe

Pain is probably one of the most complex and difficult subjects of medicine. I have spent the most of my 22 year career with the diagnosis and treatment of pain. I daresay these years have taught me that diagnosis is more difficult than treatment. If we can put a name to the source or type of the pain, it is often relatively easy to treat it. In the diagnosis of the patients who have been referred to me, I generally receive notes from my colleagues that the patient has difficulty in opening their mouth or that they experience pain in their face, head or jaw. However, these are only syptoms. The diagnosis is diseases like migraine, myospasm or synovitis whose treatments vary but their symptoms can sometimes be very similar to each other. To start, the treatment without diagnosing would be a loss of time for both the patient and the doctor. In this book you are holding in your hands, the neurologist Dr. Emel Gökmen precisely accentuated this issue many times.

Dentists have different training than medical doctors. For us, the success rate of pain treatment should almost be 100 percent. A thought like relieving a patient's toothache to only some extent can be accepted neither by my collegues nor my patients. If otherwise cannot be resolved, finally the patient gets rid of the source of his pain by having his tooth pulled out. However, maxillofacial region has a quite complex structure and neighboring regions. The patient may consider the tooth as the source of the pain but there can be another cause. Or it might be a matter of an exact opposite situation. That is to say, pain the patient feels on his head, face and neck might be caused by one of his teeth. This book is mainly based on the second issue and has clarified the issue with several case studies.

It cannot be said that the pain relation of teeth and neighboring regions which have been the subject of academic studies in dentistry for about a hundred year has come a long way. Scientific studies haven't proved yet that teeth or a mutual touching of teeth can cause pain in maxillofacial region or headaches. The method of these studies is quite simple; but the statistical analysis to examine the relationship between a group with problematic teeth and painful maxillofacial region and a group without pain and a group without problematic teeth but with pain and without pain doesn't often come up with a result. However we know that when teeth related problems of many patients we encountered in the clinic are solved, their pain in maxillofacial region and even their headaches are solved as well. We don't know the reason why while in some patients, teeth don't cause this kind of pain and in others even the smallest problem in teeth causes severe pain which is difficult to overcome! You will find the answers to this question in Dr. Gökmen's book. In summary, we haven't had outcomes based on evidences yet but it doesn't necessarily mean that we can make mistakes in dental treatments. Thus, the first duty of every dentist should be to plan and implement each patient's treatment as if he were one of the patients in this 'sensitive' group. The second duty should be to detect dental origins of patients with this condition and treating them the most effective way.

The specialist issue the author stated very clearly in her book is essential. Because there is often no problem caused by the correct treatment applied by a nonspecialist dentist. But if this kind of pain has started due to an incorrect dental treatment, a routine treatment in order to correct this condition will not be enough. The system of the patient which has been damaged will need to be rebuilt and it requires a lot of informaton, experience, skill and patience.

The other important aspect is the coordination of patients with pain. Pain treatment and especially in difficult patients with this condition is a very difficult process and requires a seperate speciality. Dr. Emel Gökmen dedicated her life as a doctor to healing patients in this sensitive group and healed thousands of patients with this condition. Most important of all, she is the first doctor I know who emphasized the importance of teeth being the source of pain in head, neck and

maxillofacial complex very clearly. I hope that she generalizes her treatment by training many more doctors.

Despite this book being specially designed as a format for patients, it will also be an useful and inspiring source for both clinicians and academic doctors and dentists. I hope this book gains wide currency in coming years as it deserves and conduces to expanding knowledge in the treatment of patients with pain.

#### Professor Dr. Tonguç Sülün

Istanbul University Faculty of Dentistry

Department of Prosthodontics

#### **Preface**

A girl at the age of three....Constantly throwing up, feeling so bad, lying down without asking anything from anyone....This is how my childhood started.

Listening to my patients, I feel like my heart is still stuck as in my childhood. I remember my days with migraine. While writing this book, rather than remembering the past, I relived the past. The first period of my profession came to my mind. Having a splitting headache, what could I say to the patients before me talking about their headaches? The only thing that I could do was to try to dissimulate. As you can imagine, I suffered a lot from migraines.

In 2004 after learning 'neural therapy' approach, my whole life changed so much. Firstly, I managed to cope with my own headaches and above all I found a way to solve migraine. I was listening to the patients with all details, taking notes, solving possible causes I thought of, taking notes of the changes in the patient once again; in one sense listening to the sense of pain and placing all these datas in a mathematical algorithm. Getting the same results repeatedly in smilar patient groups, I determined the cause for that group. The solutions I developed within time enabled me to start the writing process of this book.

Migraine and headaches are lifetime problems overwhelming first the patient and those around him so much so that the patient is tired of mentioning he has a headache and his relatives are tired of hearing it. Pain vicious cycle leads to many problems in work and social life: Sadness, anger, depression, negligence of children and spouse, reducing social relationships, loss of work and prestige, continous fatigue, unwillingness, anxiety, helplessness, frustration...

The leading cause of labour loss is migraine and headaches. In that case, there should be numerous academies, foundations and organizations to solve migraines. Unfortunately, the number of them are very limited. At least half of the patients a neurologist has seen at the clinic throughout his career have complained of headaches. A significant part of neurology training should be on headaches; but I

don't remember us doing an extensive study on migraine in my medical assisting experience.

It seems that everyone is fed up with this issue and desperate. We see that the scientific studies carried out for migraine solution have not proceeded very far. Currently migraine is one of the diseases whose causes are unidentified. So, what is the problem? Let's think about it together. In medicine, there are some basic rules for developing scientific research and new treatments. The first rule is 'Primum non nocere' namely 'First do not harm'.

'Aude sapere' which means 'Dare to know' is my second rule. 'Have the courage to use your own reason' (Aude sapere, Dimidum facti qui coepit habet) was first used by Horace and identified with the Age of Enlightenment and Kant. With his saying 'Since we have this gift, reason and free thought that God has granted us why we don't use it?', Samuel Hahnemann, the founder of homeopathy, did groundbreaking works in medicine. And Hahnemann has this basic principle 'Aude sapere' at the entrance of his school and in his book 'The Organon of the Healing Art' which he wrote 200 years ago. This valuable scientist who made me realize the fact of 'getting sick' says:

"The real art of healing is a serious, thought provoking job. It depends on man's mind, free thought and intelligence which chooses and makes decisions based on logical reasons. Healing by eliminating the material cause of the disease —causa morbi— is a common approach in medicine. Since most of the time, the disease cannot be cured with this approach, symptoms of the disease is suppressed with medication. This method which lacks common sense is called symptomatic treatment. So in short term it conciliates the patient and in long term facilitates death. This is not real healing."

The treatment of migraine cannot be successful precisely for this reason. There is no orientation to the real cause of migraine. In the beginning I also used to work with the approach of symptomatic treatment. After meeting with neural therapy, I developed solutions based on causes and started to practice the art of true healing. I regard myself very lucky to be able to work this way.

It is difficult to deal with patients with migraines and headaches; like I always said a reasonable person wouldn't put effort into it like I do. But the words of Albert Schweitzer might help expressing my effort.

Albert Schweitzer, Nobel Peace Prize winner, German-born humanitarian and medical doctor says, "The one who has been delivered from pain must not think he or she is now free again, and at liberty to take life up just as it was before, entirely forgetful of the past. Such a person is now "one whose eyes are open" with regard to pain and anguish, and he or she must help to overcome those two enemies (as far as human power can control them) and bring to others the deliverance which he or she has enjoyed" calling this "The Fellowship of Those Who Bear the Mark of Pain".

Reading these words in Prof. Dr. Serdar Erdine's book called 'The Book of Pain', I saw the similarity with my feelings. Since with each patient I was reliving my own migraine experience, with each cluster headache patient, I remembered my father, with each patient whose pain was persistent, I was overwhelmed, with each patient having a smile on his face, I also got better.

In the end, we have been recovered and become happy together. Now I know that my continous effort of many years to solve migraine is based on "the fellowship of those who suffer from pyhsical pain".

In some of the stories you read in this book, you will find your own headaches and in some of the others you will think your headache is more tolerable than the others'. Reading this book, you will say "Fortunately, there is a cure." Even if you are not a migraineur, you will better understand migraneurs around you.

Best of all, you will be able to realize the privilege of being a migraineur. Many philosophers, writers, artists and scientists in history were migraineurs. The best known examples are Charles Darwin, Friedrich Wilhelm Nietzsche, Sigmund Freud, Vincent van

Gogh, Pablo Picasso, Hildegard von Bingen, Lewis Carroll, Virginia Woolf, Stephen King...

My author friend Neşe Turan once asked, "Dostoyevsky told that epilepsy crises increased his creativity; do migraine attacks also give rise to consciousness?" She was right. As well as giving rise to consciousness, being a migraineur also brings along detail oriented thinking, the ability to see details, -possibly because of suffering- to see life differently and to be patient.

On one hand, being a migraineur myself has played a very big role in better understanding what my patients have been going through and on the other hand in analyzing the very complicated datas of my patients and solving the real reason of migraine by dealing with details obsessively.

For my writing to contribute to the solution of migraine and headaches...

to create a new perspective in people's minds

Together, let's say 'Aude sapare' (Think with free mind, dare to know).

# First Chapter: Understanding Migraine via Its Historical Development

#### **Migraine Theories**

Headaches have become a nuisance throughout the history of mankind. Even in the skulls found in prehistoric research excavations, traces of trephination (drilling a hole in the head for therapeutic purposes) have been identified. Even in the below expressions of a Sumerian epic poem of 3000 BC, a description conforming to migraine accompanied by pain in the eye exists.

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"No says the patient, my eye
My eye was ill but
Not my head
Even though I have pain in my head".
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Hippocrates, the father of modern medicine mentioned migraine aura in 4000 BC. In 2000 A.D., Aretaeus was the first to define migraine involving physical and pyschological symptoms and to describe migraines causing attacks of headaches and its clinical features. Although different names have been used for migraine throughout the history, the term 'hemicrania' (which means half headache) has been accepted and evolved into 'migraine' or 'megrim' as we use today.

In the Middle Ages, there have been some significant developments identified with Ibn Sina. It can be seen in the 15th century depictions that cauterization technique was used instead of trephination.

Ironically enough, in today's medicine, electrode placement operations on certain nerve localizations for chronic headaches unresponsive to medication are the consequences of similar approach.

Research on migraine increased after the Western Medicine got out of the Medieval Darkness. As Oliver Sacks mentioned in his extensive and valuable literature research, humoral and sympathetic theories were developed to describe migraines in the 17th century. Considering Humoral Theory, increased bile was thought to trigger migraine. As a part of the theory based on the same body fluids, bloodletting treatment was used. Today, there are still patients who seek to have treatments like bloodletting and blood transfusion.

Considering Sympathetic Theory, migraine is characterized as a condition which is caused by one or more internal organs (stomach, intestines, uterus, etc.) and spreads to the whole body through a specific internal or visceral communication. The pattern of spread which is not conscious was called 'sympathy' by the Greeks, and 'consensus-harmony' by the Romans. Thereafter, this structure with special importance connecting internal organs was named the sympathetic net. Nowadays, under the name sympathetic autonomic are sub divisions which system, there two are the parasympathetic and sympathetic nervous systems.

Thomas Willis, one of the leading physicians of the 17th century explains that migrainous nervous system can be exploded by various factors at any time and the further effects of the explosion can spread throughout the whole body through sympathetic nerves and mentions the irritation in an organ far from the pain center (negative stimulation). Willis says:

"In hysteria and migraine, there is an infinitive spread with very thin inifite laminent patterns from the uterus."

Robert Whytt, one of the best clinical observers of the 18th century proposes an integrative definition by saying:

"The human body is a system in which the sympathetic system carries the internal organ related cases like hysteria and migraine attack from one limb to another along its direct pathways in a complicated and weird way similar to a riddle".

Samuel Auguste Tissot, who wrote volumes of articles on migraine says: "A region in the body suffers because of another region."

The first monograph called 'On Megrim, Sick-Headache and Some Allied Disorders' was written by Edward Liveing. Liveing defined migraine as 'autonomic nervous system disorder' and explained the sudden and large metamorphoses unique to migraine with his theory of 'nerve storms'.

In the same period, with his theory of vasomotor (related to vessels), P. W. Lantham mentioned that the sympathetic system stimulated by emotional changes caused temporary disorders in brain causing headaches. Today, as a continuation of this theory some substances in the brain causing migraine are being investigated.

On the other hand, bio-electrical research with the development of technology in the 20. century enabled us to see functional disruptions. In the beginning of the century, the German pathologist Ricker showed that in the organism the sickening external factors caused frequency and amplitude changes in the sympathetic nerve endings first, before cellular changes. In the same period the Physiologist Von Hering said:

"The intelligent and logical use of neurovegetative system will be the most important element of future medicine."

In 1925, the German anestheist brothers Ferdinand and Walter Huneke realized that their sister had recovered from her migraine by means of the preparate with procain(short acting anaesthetic) they mistakenly had injected into her. They used procain for treatment in the following years and were credited with being the fathers of neural therapy.

In 1940, F. Huneke observed that giving procain injection in his patient's chronic wound on his right leg, the pain in his left shoulder passed off immediately (lightning reaction). Thus, the experience that negative stimulus on a local focus can create a problem not in its area, and its segmental level but in an area far from the problematic area, has been brought to the medical world. These local fields are called 'interference fileds'(störfeld).

As a result of research carried out by a group of scientists in Vienna in 1960's, it was proved that most of the diseases were caused by

problems related to the autonomic nervous system. The theory (cell-environmental system) which was developed with these research by Prof. Pischinger and Prof. Heine and called 'Basic System Theory (Matrix)'. In 1990's, the Nobel prize winning German cell physiologists Prof. Neher and Dr. Sakman continued the research which explained the therapeutical effects of local anesthetics used in neural therapy.

In short, the sympathetic system predictions explaining migraine were proved scientifically in the 20th century. 'Gökmen Approach' has been developed from my effort of finding the cure by finding the cause which I have formed by combining these predictions -which are not used in clinical practice- and laboratory studies. The results I have obtained from my treatments with this approach have provided clinical confirmation.

In this book by contrast with the acceptance that 'Migraine is a brain disease', the theory that 'Migraine is a disease which originates in the body' will be brought forward and proved.

#### **How is Migraine Formed?**

Migraine is a bio-electrical disease caused by autonomic nervous system dysfunction. In order to understand how migraine occurs, the function of the nervous system and the interference field theory should be known very well.

#### What is the autonomic nervous system?

Autonomic nervous system is a system which governs our vital activities without our conscious effort. All the vital functions of our internal organs such as our veins, blood pressure control, regulation of heart rate, respiratory, secretory glands and stomach and intestines in particular are regulated by the autonomic nervous system. As it works involuntarily, it is called 'autonomous', as it carries out vital activities, it is called 'neurovegetative' and as it regulates the organs it is called 'visceral nervous system.' The autonomic nervous system is divided into two branches: The sympathetic and the parasympathetic nervous system. Some accept the enteric nervous system as the third branch.

The sympathetic system slows down GIS(Gastrointestinal) activity, elevates the heart rate and constricts blood vessels. The parasympathetic system increases GIS activity, slows down the heart rate and widens blood vessels. The enteric system sometimes evaluated seperately carries out all functions of gastrointestinal tract such as movement, secretion and absorption.

Almost all of the enteric system is autonomously controlled. Although the structures outside the enteric system are self-autonomous, they also bind to central nervous system. The hypothalamus (brain structure near the base of the head) plays a big role in the central control. The hypothalamus is said to be the head ganglion(nerve node) of the autonomic nervous system.

The autonomic nervous system is a bio-electrical structure. This system is a micro nerve net. Assuming that the nerves were lined up end to end, the length would be twelve times longer than the length of the equator. Bio-electrical transmission lines reach every cell including the organs and body fluids uninterruptedly. An adverse

stimulus occuring anywhere in the system effects the whole functional structure. A large proportions of the diseases migraines and headaches in particular originate from interference fields in this system.

#### How is the interference field formed?

There is potassium in the healthy cell and sodium in the outer fluid. Each cell acts similar to a battery—with an electrical potential of 40-90 volts—with the effect of electrolytes. A negative effect reduces the electrical potential. This is the onset of an illness. Negative stimuli from the diseased area spreads to the whole system, namely to the whole body.

If the oxygen metabolism is sufficient, the cell can rebuild itself quickly with the energy obtained. But if there are hard, intense and constant stimuli, the cell cannot recover itself from the damage. Since it has lost its electric potential, it produces continuous rhytmic discharges. This condition which is called 'interference field' continues until one dies.

The external factors encountered throughout life especially interventions originating from outside the body such as infection, trauma and operation have a potential to create interference fields. Stimuli from these areas which are the origin of the problem(primer focus) can create a secondary focus(secondary diseased focus) by affecting the autonomic nervous system transmission network.

Since today's medicine tries to treat the diseased organ, namely the secondary focus, there are difficulties achieving the improvement and maintaining the continuity of it. Because the cause of the disease is not detected by only dealing with the location of the pain especially in diseases like migraine which are completely caused by interference fields.

The history of previous infection focuses, traumas, surgeries and poor dental treatment have a high potential to create interference fields. Especially head-neck region is more intense in terms of interference fields. About 70 percent of the interference fields are located in tooth-jaw complex.

With the local anesthetics injections(applied to the skin) repeated in neural therapy, the potential of cells in interference fields are increased. When the electrical potential of the cells rise to the level it should be with the repeated injections, cell membrane stabilization is provided(making the cell membrane electrically neutral). Thus, the negative effects of interference fields on autonomic nervous system are removed.

#### How is Migraine Formed?

Although the pain is unpleasant, fortunately it exists. Regarding pain, the greatest name of medieval medicine, Ibn Sina says:

"Pain is the sensation produced by something contrary to the body."

Acute pain starts with an external factor such as a strike, burn or fracture. In long term and chronic pain, degeneration (structural damage in the body) can occur. Migraine causes acute attacks but there is no external factor causing it, it is chronic, but doesn't cause damage to the body. In addition, migraines and headaches become so severe that they exceed their causes. Thus, the pain itself becomes the disease. External factor or degeneration (damage to the tissue) cannot be detected in the location of the pain as the majority of migraines and headaches are dysfunctions to be explained by interference field approach. (disruption of functioning)

Migraine and headache problem of the patient can be resolved if the principle that 'If there is pain, there is surely a problem somewhere in the system' is recalled and interference fields of the patient are investigated.

Migraine is the whole of many systemic and neurological symptoms which causes attacks of headaches primarily. When the attack is over, the sufferer gets well. As Willis said, "Migraine is unbearable but it is good natured." Because of these characteristics, migraine is a dysfunction.

Research has shown that in migraine, vessel control is disrupted. In the first stage, with the increase of the sympathetic activity, blood vessels shrink and the activity of intestines slows down. In the second stage, with the increase of the parasympathetic activity, blood vessels widen and the severity of headache increases.

Headache and neurological manifestation can be explained by vascular changes. During an attack, an increase in vascular permeability occurs with the constriction of vessels first and the widening of blood vessels later and disrupted vessel control. Therefore, edema develops in the surrounding structures of skull and the supply of oxygen (the supply of basic function energy of all the cells) is deteoriated.

The blood supply to the brain is reduced especially in the phase vessels are constricted at the start of a migraine attack. This situation explains aura (visual symptoms) experienced by some patients. In addition, it causes temporary neurological symptoms and some pyschological changes.

When we examine the distribution of neurological symptoms in migraine with aura, it is found that they do not link with the usual neurological localization. 'Localization' is neurological examining of the disrupted functions in the body and identifying the affected region in the brain by the neurologist. Affected areas related to a vessel in the brain detected by localization are either half or in a limited part of the body. Neurological symptoms in migraine is not only one vein; they are scattered in the areas which are fed by vessels affecting half of both brains. It does not link with the localization.

In studies where brains are assessed in the event of an attack, the hypothalamus is shown to be affected. The hypothalamus (the structure in the brain) is the central ganglion of the autonomic nervous system. As a result of the storm breaking in the autonomic nervous system, it can be considered that the hypothalamus is secondarily affected.

Systemic complaints of the autonomic nervous system can develop in migraine. Nausea and vomiting are the most common symptoms. This condition can be explained by the activity of bowels slowing down as a result of autonomic control of digestive system being disrupted. In some cases, the bowel movement can increase causing diarrhea. Sweating, falling and rising blood pressure, need to urinate and general weakness are systemic symptoms.

As Wills noted, migraine is a 'nerve storm' in the words of Liveing which develops with physical and emotional triggers as a result of a temporary explosion of the autonomic nervous system.

Everyone has interference fields. Interference field creating migraine can be explained with susceptibility to migraine. The nervous system of these people have hypersensivity genetically. The negative stimulation from the interference fields of these people with sensitive system overturns the autonomous nervous system with the external triggering factors and iniates the nervous storm. Despite not having experienced a migraine attack yet, it can be said that people sensitive to sound, light or smell are prone to having migraine. Although this sensitivity triggers migraine, it can create positive outcomes for life (migraine being more common among artists and philosophers and the achievements of migraineurs in complex business).

External triggering factors are often thought to be the causes of migraine. Triggers such as stress, sleep mode disorders, hormonal changes during menstrual period, wind and some food (like cheese, wine and delicatessen products) only cause the present interference field to get out of control. Migraneurs are advised to change their habits, control their daily lives, learn to live with migraine, but 'cause' and 'triggers' should not be confused with each other in the journey to understand migraine.

Let's not forget:

Neither triggers can be controlled nor migraine can be treated by limiting life. Migraine treatment is only possible through correcting interference fields which overturn the autonomic nervous system. **Second Chapter:** 

How Should the Treatment of Migraines and Headaches be?

#### Cause-oriented, side effect free treatment method

Migraine is a treatable disease, but migraine and headaches are problems too broad to be solved by only one physician. A team of physicians who are experts in their fields is required. This team should consist of the patient's doctor who is well-informed about the interference field approach (neurologist, pain specialist, family physician) and specialist dentists (endodontist, restorative therapist, periodontologist, gnathology and prosthetic specialists, maxillofacial surgeons).

The doctor administering the treatment should have enough level of tooth-jaw complex knowledge to work with other physicians. Despite being difficult, it is the most important issue to face for the doctor who wants to treat these patients.

As in all treatments, patient is the most important factor in migraine and headache treatments. Cooperation with patient is very important during the treatment process. Patients who have suffered from migraine and headaches are so hopeless about getting treated. As tooth-jaw complex treatments of some patients take a very long time, their hopelessness makes it even more difficult to cooperate.

Patient should be patient and should not get desperate during the treatment process. The purpose of this treatment is to solve the causes of pain. Cause-related treatment process can be very short or long term. There can be some negative changes in pain pattern during the treatment process. The treatment process shouldn't be evaluated negatively in the periods during the periods of increased pain.

It shouldn't be forgotten that the treatment approaches described in this book has no side effects and that no additional intervention is suggested. Toot-jaw interventions recommended by specialists are also essential for the patient's dental health.

#### How should the approach to the patient be?

The physician should start the treatment by trying to empathize with patient. Mostly, the patient feels suffocated due to long term pain and other problems pain has caused. There is a myth surrounding migraines that has been believed for thousands of years suggesting that there are no cures for those who suffer and this concept is very much drummed into their minds.

The patient probably has some people around him having suffered from headaches for long years. In most cases, he has tried many treatments and developed depression as a result of long term pain. He is unhappy, desperate and fed-up.

It is a well known fact that long-term pain leads to chronic depression. Considering the detail oriented character of migraine patients, long time should be allocated to the first meeting with patient. Even though the patient may not be able to absorb the majority of things told due to the situation he is in, this is necessary for cooperation.

It is desirable that the patient tells his experiences first. He shouldn't be intervened as much as possible while telling his story. Until now his pain story might not have been listened from the beginning to the end by physicians or people around him. He may not be willing to tell it anymore. When the patient sees the doctor is eager to listen, he feels more alive and the monotony of his voice diminishes, thus he starts to trust his doctor more. As all the details of the patient's narrative are the most important guide to diagnosis and follow-up of the physician, if possible, it should be noted the way the patient tells them.

In the second stage, detailed questions about pain should be addressed. A full description of the pain should be made by interrogating the type, the spread, the time of occurence of pain and its relation to other external factors. The present illness, the past history of medical illnesses, the history of surgeries and the stories of migraine, headache and illnesses in his family should be recorded.

Afterwards, it should be mentioned to the patient that all the points in his medical story are essential so his life should be questioned once more. The patient's life chart should be made with the information obtained.

The stories of childhood illnesses -especially throat infections- and falling should be noted. The patient may tell he never got ill in his childhood and in the next stage of the interview he may mention his tonsils were removed. For this reason, instead of short question and answers, indirect questions should be asked repeatedly.

The period of puberty especially in women has a particular importance. The first menstrual flow, menstrual cycle regularity, whether bleeding causes bloating and irritability and whether it is painful should definitely be questioned.

Surgeries and dental treatments gain importance during adulthood. Gynecological history in female patients is particularly important. The proportion of girls to boys with childhood migraine is nearly equal. However, migraine is four to five times more common in adult women than in men. This is because of interference fields created by gynecological interventions. Birth control method, the way she gave birth and whether she had an abortion should be asked to the female patient.

If the patient's relative is with her in the first meeting, the question of abortion can be postponed. One day, my 60 year old female patient came to the first meeting with her 82 year old mother. My patient's migraine started in her thirties. She didn't specify any event causing interference field in the years pain started. When we started the treatment, she told me she had had an abortion in those years but she couldn't mention it to me as her mother was with her in our first meeting. Only then I could detect the interference field of the patient causing migraine.

Once the general life story of the patient has been obtained, headache timeline should be formed. The pain doesn't necessarily have to have the same features as the previous pain. Even a mild headache, the process should be recorded with the onset of it.

Interference fields and the course of pain should be placed in the generated chart. If the age of onset of pain, the interference field

developed during that period, the characteristiscs of pain are compatible with each other in the headache chart, it is where the actual interference field of migraine is. Correction of interference fields should be started from this point.

#### The most obvious interference fields in migraine and headaches

Particularly in childhood migraine, tonsil is the most important interference field caused by upper respiratory tract infections (tonsillitis, angina, pharyngitis, etc.). It doesn't necessarily have to be a severe infection for an interference field to develop, we all have more or less interence fields in this area.

Scars due to past operations (especially cesarean, abortion, hysterectomy and contraceptive coil procedure) have high potentials to create inteference fields.

Most of the interference fields are located in tooth-jaw complex. Despite having come out normally and not being decayed, wisdom teeth lost their function in the evolutionary process and they are like stump organs which lost their healthy structure. Wisdom teeth are the most common interference fields especially among teenagers suffering from migraines. Tooth cavities, overfillings, missing canal treatments, the edges of prosthesis which haven't been aligned properly and the occlusion of the prosthesis which have not been well adjusted, gum diseases, temporomandibular joint disorders have the high potential to create interference fields.

All implants and amalgam fillings —even if they are unproblematicare accepted as interference fields. However, the treatments were successful in some of my patients with migraines and headaches despite their previous implants. My experience shows that if the implants are well adjusted in mouth and not overloaded, they don't cause a negative stimulus high enough to initiate headaches and migraines. My observation also applies to analgam fillings. The presence of amalgam fillings does not prevent the treatment of migraine and headache.

In patients having different interference fields than mentined above, time chart will be guiding. In the first months I started neural therapy, I had a 16 year old patient telling he had constant headache. When I asked him the onset of his pain, he told me that he had fallen from the motorcycle, had broken his wrist and his father had beaten him three months ago which started his pain. I applied a small number of procain injections (local anasthetic used in neural therapy) on the skin of the region where the fracture was located. He didn't experience headache again.

I had some other patients with a history of broken fractures. But in none of them, the fracture caused an interference field for headache. In the patient mentioned above, the pyschological trauma of being beaten by his father as a young man in the town square was added to the shock of his wrist being broken. This pyschological trauma caused the fracture to create interference field. This story emphasizes the importance of time chart and reveals the necessity to question pyschological traumas as well physical ones.

Migraine is a disease usually associated with stress. This is why patients constantly tell doctors about their sadness, stress and difficulties in their lives. For them, the cause of their migraines is stress. However, stress is a usual part of life. The events causing pyschological trauma need to be questioned.

#### What should be considered in the treatment process?

The treatment of patients with migraine and headache differs from the usual treatment process. You should also listen to the pain while listening to the patient. In addition, integrative assessment is needed at each stage of the treatment process.

The treatment starts with setting the priorities of interference fields in the light of information from the story of the patient. Soft tissues (such as throat area and surgery traces) are corrected by neural therapy. For tooth-jaw complex, after treatment plan is done, the patient is referred to the relevant specialists in turn. The stages of dental treatments and their effects on pain are followed by the doctor.

The characteristics of pain can change, decrease or inrease during the treatment. Should the physician listen to the pain carefully, pain guides him. Changes in pain can also change the order plan of interference fields treatment. Supposing, cesarean area has been planned to be corrected in the fourth session, but the patient's pain increase and turns into one sided headache. In this case, the pain is actually telling the doctor that the interference field hierarchy has changed. In this case, dental treatment should be prioritized.

Listening to the patient in the first meeting is not enough, the doctor has to listen to him carefully during the treatment as well. The patient and his pain should be listened — again and again as if for the first time- and the treatment has to be replanned.

Some of the patients whose treatments have been completed, can come back to the clinic again after some months or years due to recurrence of their pain. At this stage, pain should be listened from the beginning. It should be checked whether a new interference field occured during this period. Again, every information should be aggregated and the treatment should be continued. A previous interference field may be reactivated (a recent throat infection, etc.). Meanwhile, patient may have had a new operation (such as cesarean, abortion, etc.) but my experience shows that new interference fields are mostly related with teeth.

Treating migraine and headache requires patience and intense attention. The patient group is spesific and in a sense difficult. The difficulty is due to their higher level of sensitivity compared to the rest of the society as well as their despair caused by the pain they have been going through. The most difficult part is experienced during dental treatment process since the physician has to administer the treatment by cooperating with other professionals outside his field.

While small details in dental treatments may not cause any problems in people without migraine, it can trigger pain in migraineurs. It is also difficult to find skilled professionals working sensitively, meticulously and expertly.

In conclusion, all this is worth the effort since after the treatment is over, patient's life changes in a postive way. Patient getting rid of medicines, returns back to his children, family, work or becomes more efficient at school. The best thing is that from now on he is a healthy person and smiling. Both the physician and the people around the patient observe the changes in the patient during the treatment. Patients do not tend to remember the process and their physican after getting rid of the pain. As we know, the more severe and intense the experience was, the more we don't want to recall.

It is enough for us(doctors) just to know that we were able to treat our patients.

#### **Advice to Patients**

You are not alone, no matter how hard the things you have been going through. Millions of people share the same experiences with you. Should you absorb the suggestions below, your life will change positively.

The first step is to accept the fact that migraine is a treatable disease. No matter how hopeless you feel, if you start to have this treatment, it means you have expectation to recover. Should you believe in the treatment, the process will continue more easily. In addition, believing in the treatment also motivates you to keep up with the treatment. Therefore it is not likely for you to stop it halfway through and lose your chance to recover as a result.

This treatment includes treatment stages related to the causes. Your doctor corrects the causes of your pain respectively. Do not expect your pain to go away immediately. Your pain can response differently to the treatment. Your pain can go away and recur in the following sessions or gets more severe at the beginning of the treatment. Don't despair. Your pain guides the doctor with its response to the treatment and tries to get better. Please help your pain and your doctor with your patience.

Don't compare other patients' pain patterns and their pain treatment response with yours. The treatment process is not linked to the severity of pain and the length of time you have been suffering from pain because not your pain but the causes of your pain are treated.

Everyone around us has interference fields. Interference fields creating a disease or not depends on one's genetic predispositions. Avoid making evaluations such as 'My friend also had cesarean section or my sibling has worse teeth than me, but neither of them had any problem'. Even a small amount of decay can cause unbearable headaches and some dentists unexperienced in this field can say, 'This small decay won't cause headache and there is no need for a treatment.' Follow the recommendations of your doctor who administers your pain treatment.

The duration of the treatment can sometimes be prolonged. In general, teeth clenching and mouth splint treatment due to the problems of temporomandibular joint can cause prolonged treatment. Don't forget that pain is the body's cry for help and be patient enough to have regular follow up dental visits for your mouth splint to be examined and keep in contact with your doctor.

If your pain recurs after your pain is under control and your treatment is finished (even after many years), don't think that this treatment hasn't worked. Please contact your doctor again. Your doctor won't start everything from the scratch, she will get your pain under control by resuming the treatment again from the last point where you previously stopped

This treatment is a chance for you to get rid of your pain. It doesn't harm you. The best thing about this treatment is that it makes you a healthier person since the interference fields in your body are corrected. As a result of this treatment your recurrent throat infections will get better, your hormones will be more balanced, if you are a woman, you will have a healthier menopause in the later ages, you will get rid of your teeth infections which you haven't even known harming your body and as your jaw joint is balanced, your dizziness will go away and you won't probably end up having hearing problems when you get old.

Just be patient. You can get rid of your pain.

Third Chapter:

**Understanding Migraine via Stories and Solutions** 

# Understanding Migraine requires an 'Integrative' Approach

Although migraine is often claimed to be just headache, it is not as simple as defined. It is not easy to understand this disease which involves multidimensional and different indications. This disease cannot be understood by sorting the syptoms of migraine attacks as integrative approach to the disease is required. Actually migraine having different dimensions can best understood by experiencing it.

### Therefore:

This book has been written with stories of patients

For doctors to realize the integrity and the soul of the disease

For patients to find their own stories in this book, to know that their experiences are understood, to better understand the disease via the stories of others

For the readers who don't have this disease to understand migraine and to see migraineurs from a different perspective.

Different dimensions of the disease were expressed through the own expressions of patients. Specific causes are identified with specially selected stories specific to each age, gender and condition and appropriate solutions are stated. In order to understand the interference fields which are the causes of migraine and propesed solutions, I recommend you to read the stories after reading previous chapters.

I believe that experiencing and understanding migraine is wealth. After reading I hope you will agree with me.

Let's listen to the stories of my patients with migraine from baby to elderly, young and old alike.

# A story of a Comon Migraine (without aura)

## Before the Treatment:

"I have been suffering from headaches since high school. Whenever I am hungry or sleepless, I have headeaches. My profession is very stressful with very tiring meetings and business journeys. In the meantime I also have to deal with headaches. When my pain starts, I just want to give up all the work and lie down. If I have the opportunity to do so which is not always possible, it is easier for me to get rid of the pain. I take my migraine medicines and go to bed. I don't want anything, no light or sound. I fall asleep. After waking up, I come back to life feeling refreshed.

If I have busy meetings, I take drugs one after the other. My pain still doesn't cease. At the end of the day, my nausea gets worse and I throw up. My headache continues the next day, I feel very tired. I always have headaches on my periods which are the most severe ones. I had to go to hospital from work to have injections a few times. I used to have pain once or twice a week. Both stress at work and my headaches have gotten worse in recent years.

I have pain in one side of my head. Sometimes pain can be in my left side as well, but mostly it comes in the right side of my head. The pain strikes my eye. I have this throbbing pain like pulsing sensation. It sometimes comes from the back of my neck. I used to have the pain only in my eye and temple. In the last years I have also started to have pain coming from my nape and spreading to my whole head."

### After the Treatment:

"After my pain became more frequent, I decided to try this treatment. Appearantly, the most important cause of my headaches was my teeth. My wisdom teeth caused the pain in my high school years. Then I had them removed. And when my doctor told me now that I had been clenching my teeth, I didn't accept it. But then I realized that I was clenching my teeth even during the day. My two decayed teeth were treated. I started to use mouth splint for my teeth clenching problem. I had neural therapy sessions and my pain ended. I still have got a bit of headache in my stressful times but it doesn't worsen and interfere with my life."

# What is common migraine (without aura)? How is it treated?

Headache is the primary symptom presented during a migraine attack without aura. It is mostly accompanied by nausea-vomiting. There can be different symptoms in pre-pain, pain and post pain periods. Mostly, these symptoms are not as significative and primary as headaches. In pre-pain period, the symptoms warning you a migraine is coming can be weakness, restlessness, decreased or increased appetite, distress and irritability. These syptoms usually occur a few hours before pain. And they may also rarely occur a few days before pain.

"Before getting headaches, I am famished and feel the need to eat something. I don't know what to eat. I lose my appetite. I try one bite of some food, and then my headache starts."

"Hours before my headache starts, I have a very increased appetite. I gorge myself with food. Mostly I have a craving for sugar. Eating doesn't do any good, but if I don't eat I feel even worse."

Moderate or more severe throbbing headaches are usually in one side situated around temples. The severity of pain decreases in the beginning and at the end of a migraine attack. Although the overall structure of pain is pulsating, it can also be piercing, tightening, stabbing and penetrating. Throbbing pain feels like a heartbeat.

Migraine, hemicrania is known as half sided headache. However, some migraneurs in all attacks or all migraneurs in some of them can experience pain on the entire head. The characteristic of migraine is that the level of pain is so excruciating that it hinders daily life. Like tension headache, the pain can also be located at the back of the neck. Starting in the neck, it moves to the front of the head and later can become throbbing pain mainly in either side of temple. Also, it can only be located in forehead.

In a simple migraine, nausea and vomiting are the second most common symptoms. Attack can sometimes start with nausea. During the attack, being inappetent, patients cannot eat anything. Even the thought, sight or smell of food can cause increased nausea. Vomiting usually occurs towards the later end of the attack. In some cases migraine attack can end even after the patient is sick. And even though stomach is completely empty, forcable dry-heaving continues in place of vomiting.

During attacks, with their pale faces and deeply sunken eyes, patients may seem to be distressed and suffering. Veins may become noticeble in the side of the temple and forehead where the pain is located. Both eyes or one eye may shrink and collapse inwards. The sufferer can also experience eye redness and nasal blocking.

In all attacks, patients experience various levels of weakness, fatigue, lack of energy, drowsiness and feel the desire to rest. The pain usually ends with sleep. As well as patients feeling rested and refreshed after waking up, there are also ones who continue to suffer from exhaustion the next day. Some patients can also get rid of pain if they manage to sleep immediately after sensing headache is coming.

Patients often have no tolerance for external stimuli. High sounds, especially repetitive sounds (such as noise of a machine in the distant, etc.) are perceived as being hit in the head with a hammer. As well as triggering the pain, a usual smell —parfume, food smell- can also increase the existing one. If possible, patients wants to be in a room as dark as pitch. Even a light leaking around the edges of curtains can drive them mad. During a migraine attack, they can become so angry, a completely different person.

"When my migraine starts, I immediately go home without telling anything to anyone. I don't even mention my headache. If one of my colleagues asks something, I lung at him. I become so angry. I see or speak with no one including my boyfriend for two days. I know that I can be so angry, aggressive and hurtful that I can regret later."

Hands and feet may become pale and ice-cold. Symptoms like paleness, breaking out in a cold sweat, feeling cold, trembling, low blood pressure, a semi-conscious state may occur.

Migraine without aura can start at any time of life. Mostly it starts during adolescence. The cause of migraine starting at these ages is mostly due to wisdom teeth coming in, trying to come in or not being able to come in. Migraine of these patients can continue as common migraine at older ages. In some cases, pain related with tension headaches can be added to this condition as well. The interference field of those whose migraine without aura started at an adult age are mostly caused by dental problems and gynecological interventions. In the treatment, considering the onset of headaches, related interference fields should be prioritized and tooth-jaw complex and gynecological region should be examined. Along with neural therapy, tooth-jaw complex problems should be treated by related specialists. A simple migraine can become daily constant headaches at older ages. At these ages, increased stress is not the direct cause but it can increase bruxism. Having missing teeth can increase the negative effects of bruxism incrementally. Stress cannot be changed by the treatment but these factors should also be evaluated.

## A Story of Migraine (Classical) with Aura Attacks

"I don't experience so much pain. I wish I did...I experience nausea, vomiting, numbness, vision and speech disorders all together. I lose my sense of direction, I have trouble thinking. I find it hard to do everyday things. For instance, during one of my attacks I didn't know how to stall my car so I had to leave the car running.

First my sight deteriorates and I have tingling sensation in my eyes. I can only see the half of a person opposite me. On looking at a number, I cannot see the other half. Everything starts in thirty minutes. I lose my sense of direction. It last started while waiting in the bus stop. I didn't know which bus to get on, couldn't read the numbers on the bus. I just had to get on whichever bus came.

In the meantime, I have numbness in my left and right feet going up to my lower back. At the same time, one side of my nape starts to ache. Numbness starting in my arm goes up to my shoulder, my eye and eyelashes. Meanwhile I try to get myself back home. As my mouth is numb, neither can I swallow nor spit. I feel nausea but don't know how to throw up. It feels like there is an obstruction at the back of my throat. I throw myself into the house and lie down. After sleeping for a little while, I end up waking up with the need of throwing up.

It does not end with vomiting. My attack goes on for a week. In my last attack I came back home, lied down and slept. By the time I woke up, it was evening. I thought I had slept for an hour or so, but actually I had slept until the next day evening. Life stopped and I could only realize it later. In my previous attack I was at a private hospital. I had a very high fever. Not being able to reduce my fever, they referred me to a university hospital. They couldn't reduce my fever there, either. The doctor examining me told me that there had been nothing wrong with me and asked me to squeeze his hand, I was unable to sense his touch.

After my headache and vomiting stops, I think my attack still continues the following days as I become very sensitive. Like a bionic man, I can see and smell everything around me. My sense of smell becomes so heightened that the smells in the rooms are unbearable for me. I am looking at people and perceive them so differently. My

girlfriend's nose seems to me as if it was huge or somebody's arms as if they were growing lower. Objects appear as if they were growing or crashed. Although normally I am a very quiet person, at times like these I talk incessantly and unnecessarily. I become a completely different person."

# What is a Migraine (classical) with Aura? How is it treated?

Migraine with aura is complex with a variety of indications such as changes in sense vision, hallucinations, difficulty in speech, expressing oneself and various levels of perception disorders (especially perception of place and time). The strength of words are not enough to express an attack of migraine with aura. There is a scary side to it which prevents a sufferer from putting it into words. Remembering aura arouses a frightening, distressing and a strange feeling like emptiness and being lost. Even I have difficulty in writing this experience. I think that experience of an aura is much more complex, severe and intense than the things written about it until now.

I experienced my first aura when I was a neurology assistant. I was petrified on the stairs of the clinic. I was struggling to see the surrounding due to the effects of flashing lights and blind spots in my vision. I couldn't walk down the stairs. I don't know how long it took until I realized that I was experiencing a migraine aura, but the intense fear, the inability to think, the perception of emptiness were indescribable. Strangely enough, -with a spatial metaphor- I got the feeling that I was being pulled into the black hole.

In the later stages of my life, my auras recurred 3-5 times a year. My auras which went on for 15-20 minutes, were leaving a slight headache, mental slowness and slowness of perception behind. Whenever my auras started, it took me some time to reach the awareness which was "These are the usual things I experience during these attacks. It will dissolve in 15-20 minutes." For me, this is the most interesting feature of migraine. You cannot immediately understand what is happening when an attack starts even if you have experienced it many times before.

An aura can be followed by severe headache. While some patients only experience migraines with aura and never suffer from headaches throughout their lives, the others may experience headaches with and without aura or aura without headache.

In a migraine aura, blind spots, stars, flashing or flickering lights, sparks or zig-zag lightning patterns appear in visual field. Reflections of this condition exist in the pictures of George Seurat who started Pointilism (in painting) movement. 'The Seurat Effect' started to be used in the field of medicine.

Points can grow larger and constitute distorted crescents or circular shapes with wider edges called scotoma. The bright ones are generally asymmetric crescents. It is like emptiness surrounded by lights and shiny inside. Dark scotomas are mostly located in the center of the eye. These images continue even after one closes his eye.

"I get cloudy vision, it feels as if I was looking through an ice block."

"I tremble. I cannot read as letters seem to be moving".

Visual symptoms were the most primary symptoms in my aura. First, I used to see flashing lights striking one by one. They were followed by black spots which looked like a swarm of black ants and spread all over my vision. Let's assume that more than half of the pixels on LCD TV's are randomly missing. The missing places were not dots but more like spaces with spatial deepness. Black spots turned into shapes like flashing lights and small flies. They came together, formed a crescent moon and this crescent moon located itself asymmetrically in the centre of the place where I looked. It was such a perception that I had the ability to see the outside of this field; but couldn't. I was petrified.

Saint Hildegard describes these shiny shapes as "They start at the top of my vision field and go out of my vision when they go down." Indeed, these luminous stars and threads come from space, become visible and shiny all of a sudden, move and change places in the visual field and disappear elsewhere in the visual field, in space.

"A small point grows bigger and bigger, then looking like an umbrella, it slides upwards. At last it slowly disappears."

Some sufferers experience their auras in different ways like distressful, dark, luminess and colorful. In some cases, loss of vision in half of the visual fiels occurs.

"The image is broken as if the fragments of the image were dismantled and re-assembled in a weird configuration which looks like Picasso's pictures."

"It feels like gazing into the mouth of a volcano. I get caught up in flowing, bursting and bubbling colours."

Sometimes, these symptoms can be so mild that they are not very noticeable. Sacks mentions that auras are much more commonly experienced than realized and even though people experiencing cloudy vision or flickering spots and flashing lights in their vision field do not consider it as a problem, it may as well be migraine.

As visual symptoms continue, some patients start to experience numbness which starts in thumb or finger tips and move to one arm, periphery of mouth and tongue. Difficulty in speaking or swallowing can also develop. The sufferer can struggle to find the words and feel as if his brain was not functioning.

"I may have moving dots or lights in my vision. I sometimes forget how to speak. I cannot find the words to speak."

Dizziness or balance disorder may occur. Perception can change and hands, arms or legs can be perceived as if they grew longer, were missing or not functioning. Images become small or big, get closer or move away and the patient can feel as if he was looking from outside, from a different world.

"I have cloudy vision, sometimes I see my hand from a distant as if was growing longer. Sounds also feel as if they were coming from far away."

Sharpening of the senses are more obvious in migraine with aura than it is in common migraine. Since the threshold of sensory perception changes so much that a minumum level of voice, touch, smell or light can be perceived as very high and discomfortable and can make the patient very irritable.

A strange, heavy feeling of nausea and tightening and pressure feeling in the stomach spreading to the throat may occur. Fainting can occur as well. Intense drowsiness, forced sensory stimuli, hallucinations can cause a person to suffer from a condition like sleep paralysis. Patients can have the feeling of emptiness at that point but it is not a complete loss of consciousness. He cannot know how much time has passed, there is a time gap he cannot remember.

Sufferers go through different feelings during an aura. Feelings of fear and emptiness are the most significant ones. As they lose their concentration, they become clumsy. Rarely, some patients experience pleasure and happiness. Even in more positive experiences, feeling of weirdness is prominent.

The disunity of perception experienced in the beginning of aura eases in the later stages and in spite of aura, patient can still continue working. The author of Alice in Wonderland, Lewis Carrol must have experienced so many different auras that his book involves all the characteristics of an aura.

Alice cannot stand the pressure of those waiting for her to play the piano and asks for permission to go out to the garden. The pressure she experienced triggers her migraine and she gets an aura. From now on she is in a completely different world. Everything in this world is nonsense, objects grows and shrinks, colors change, playing cards come to life, grinning cat speaks with hasty rabbit...and then she can go back to play the piano. The whole story must take only some minutes as her absence doesn't cause any problems. But she has not fully recovered from her aura as after she finishes playing the piano, the grinding cat and the hasty rabbit are also present in the room applauding her.

Our esteemed writer, my friend Nihat Ateş says "Art actually means creating parallel worlds, bringing the created thing to this world". Lewis Carrol also put his parallel world of migraine aura down on paper as Alice in Wonderland.

For the treatment of migraine with aura, we should first have a look at the timeline of migraine. It is remarkable that the onset of migraine with aura is mostly childhood. If the onset is adolescence and early adolescence, signs of childhood migraine (headaches, vomiting attacks, fainting, dizziness, serious car sickness) are observed. Also, childhood infections (ongoing even in adulthood) are seen in all

migraine with aura patients which suggests that the interference field is tonsil.

Treating tonsil interference field holds great importance in the treatment of migraine with aura. I have observed that, in order to get results, applying neural therapy repeatedly to his area is required for patients with severe aura attacks. Treatment of patients with relatively milder auras is easier. I couldn't achieve a complete recovery in few of my patients with severe migraine with aura. However, I managed to decrease the frequency of their attacks. I am hoping that in the coming years, with more treatment cases, migraine with aura which involves more terrifying feelings than pain will be solved completely.

# What is complicated migraine? How is it treated?

Complicated migraine is the neurological form of migraine being stabilized. There are so many findings in migraine with aura but they are disorganized. These findings do not exactly correspond to localization in neurology. However, in complicated migraine neurological findings correspond more to localization. Patients usually have numbness, weakness generally on one side of the body and aphasia due to affected centre of speech (not being able to find the words, understand what is said and read, repeat what is said and write).

When I was an assistant, I encountered a male patient in his thirties with severe weakness in his right arm and leg who was taken to hospital during night shift. He was neither able to tell his problem nor understand what was said to him. He couldn't say the name of the objects (such as pen, button) which we showed him. He couldn't repeat the words we said. The examination finding including aphasia examination suggested the loss of power in the right side and that he had had stroke attack which meaned either the vein feeding the left side had either been bleeding or had been clogged. We couldn't find anything in the tomography image. Apart from the examination, there was no finding to explain the stroke. The information given by his relatives didn't help us either. So we hospitalized him with stroke diagnosis. In the following hours, the patient's stroke symptoms began to improve. He was able to express his problem. Meanwhile his headache also started.

He told that in the previous afternoon while he had been working in the garden he had seen some light spots flying before his eyes, then numbness in his right foot and fingers had occured and he had gone inside, in thirty minutes he hadn't been able to move his right side or speak. He added he had experienced something like this years ago but it had continued for shorter period of time. After listening to the patient, we came to the conclusion that he wasn't having a stroke, it was a migraine attack. Complicated migraine is a severe form of migraine with aura. In one sense it is a condition involving temporary stroke. The same migraine with aura treatment approach should be applied in complicated migraine treatment as well.

# **A Silent Migraine Story**

## Before the Treatment:

"My story is an ongoing event for thirty-five years. I am fifty and it first happened when I was fifteen. It was summer and I was in the sea. Zig-zag lines appeared all of a sudden across my eyes. I couldn't see anything.

I feel weird and this distressing fear for years whenever I have zig-zag lines in my vision. This feeling is the hardest thing to cope with, it finishes me off. I hope to God nobody goes through such an experience. My vision distortion goes on for half an hour. Sometimes everywhere becomes dark. The attack goes on for two to three hours in total. Numbness starting in my left or right or my little finger moves to my thumb and up in my body. In my first experiences, I wasn't able to find the words to express my problem after the zig-zag vision was over. I spoke with a lisp. My speech hasn't been affected in my recent attacks.

In my middle school and high school years I would experience it two or three times a month. It didn't happen during my military service. After returning from the military service, it restarted. I tried my best not to experience the same things again. Drugs, acupuncture or botox did not work. Lately, I have been suffering from it once a week. I don't get headaches, but the things I have to go through just finishes me off. I feel like going crazy."

### After The Treatment:

"During the treatment my attacks reduced in frequency. Although my attacks were still terrifying, they went on for shorter time and their degree of severity decreased. So many dental problems in my teeth were detected. I am having dental treatment in a university hospital. It takes time but I know this will end after my treatments are completed."

# What is silent migraine (aura without headache)? How should it be treated?

Migraine is identified with headache. The other symptoms of migraine without headache is defined as "silent migraine". It can also be called as aura without headache.

In silent migraine, especially the visual symptoms are evident. Neurological complaints such as odor hallucinations, numbness, tingling, speaking with a lisp and speech disorders can occur. Physical symptoms such as nausea, vomiting, diarrhea, lack of appetite, desire to eat something, tiredness, frequent urination can be seen. Confusion and irritability may develop.

Mostly mild aura symptoms are seen in silent migraine. However, severe symptoms can develop as well. A silent migraine attack can go away with eye scintillation symptoms (lights, zig-zag lines and spots in the field of vision). Headache is not experienced and the other symptoms are mild in silent migraine. But still the feeling of it is very unpleasant.

In my silent migraine attacks which I experienced in my adult age, I would experience a serious distress and a break from life. It would go on for fiften-twenty minutes and would ease off. On the days I had silent migraine I would feel impatient and frustrated. I wished the day ended quickly. I didn't want anyone to ask me anything or want anything from me. I felt so confused. I lost my apetite. Even the smell or the thought of food made me feel sick. My olfactory capacity heightened and I was able to smell those things that I couldn't do so previously.

In fact, I would rather have painful migraine than silent migraine. If I had it, I would take my medication and my attack would ease off with time. Whenever I had an aura like this, I didn't suffer from headache but I lost the whole day. The distress I was going through was indescribable. It was really hard to call my experience quiet.

## Silent migraine is not silent as it is called.

## **A Childhood Migraine Story**

Before the Treatment:

The Child: " I wake up in the morning and it—showing his forehead-hurt here. I wake up early if I have a headache, if not I sleep. My mum does massage and runs hot baths for me, gives me mint oil to sniff. It sometimes goes away and sometimes doesn't. My pain gets more severe and I vomit. I cannot go to school. If I have headache at school, I cannot listen to the lesson. I come back home. When I watch TV, play games and study too much, I get headaches. I cannot bear the light when I have a headache."

Mom: "My son is 10 years old. He has been having headaches since he was 4. He vomited until he was 5. He used to cry a lot when he was a baby. He was a baby with colic. He sometimes turned purple and fainted. His fainting spells stopped after he started talking. This year his headache has gotten much worse. Last month, maybe he had headache every day. His headache starts at school. He is so fatigue when he comes back home. He doesn't even want to move. If he starts to have headache while playing, he stops playing. If he studies in the evening, he gets headache. If the pain is too severe, he throws up. He feels relieved after throwing up. Even if he takes painkillers, he still throws up. Medicines don't help at all. Last year his pain continued for two days straight non stop. He was saying to me "Mum, save me". I couldn't do anything to help. Meanwhile his nose was congested. Because of this problem he had to finish four courses of antibiotics. He uses nasal spreys all the time. It has been a month since his nose was last congested but he has so much headache. I also used to get headaches in my childhood. His aunt also has migraine. But none of us suffered that much. Last month he couldn't go to his school for eight days. Although he cannot study due to his headache, he is still successful in his lessons."

#### After the Treatment:

"The doctor spoke to my son first. She told us to come to her clinic for a while until my son got used to her and then she would start the treatment. She warned me not to mention anything about the injections to my son and leave it to her. The third time we went, the doctor applied a few injections. And his pain immediately decreased. After the next session, he didn't have any pain. The doctor told us to call them if he had any pain. After three weeks he had a short episode and he had another session. This winter has passed with ease. Now we know that if he has pain again we will have another treatment session."

# What is childhood migraine? How should it be treated?

Headache among children is more common than known. Firstly, child mentioning his headache should be regarded as a problem.

Childhood migraine may not occur with typical symptoms of adult migraine. Headache in children is often not severe or it may not even develop. Migraine aura is rarely seen among children. They mostly don't mention it and when they mention, it can be thought they create it in their imaginary world. For this reason, parents shouldn't wait until the child has severe headaches and throws up(like the mother in the previous story). As children have difficulty in describing their pain and experience, mothers in particular should be careful to detect migraine.

"Since my son started talking he has been telling me he has a headache, but he doesn't have a migraine. Since he complains about his headaches in crowded family environments and home visits, I believe that he only seeks attention. I sometimes give him a basic medication and his pain goes away. And sometimes without medication it passes off after some sleep. He has never said he has a very bad headache."

The mother who was seeing me because of her migraine used the expressions above when I asked about her son. She thought her son didn't have migraine. However, his son had a very typical childhood migraine. As mothers with migraine compare the severity level of their children's seemingly mild headaches with theirs, they generally may not attach importance to their children's headaches thinking their children immitate themselves. It should be known that:

# Children do not use headaches as an excuse or a way to seek attention.

To understand the children with migraine, it is necessary to observe them carefully. A child with migraine can get sick one day for no reason and he can continue with his life the next day as it has never happened. If he stops his favorite activities like playing games, watching television and using computer and goes to his room with a pale face becoming stagnated and fatigued, it should be considered migraine. Even nausea, vomiting and abdominal pain on its own without headache can be the signs of migraine in children.

These children are mostly quiet, calm and successful at school. Car sickness and their mothers having migraine are the common features of the majority. As in adults, intense stimulis like crowd, light, sound, smell can trigger migraine in children. Excessive activity (excessive playing computer games, too much running and sweating, staying under the sun for long) can also induce migraine. Their migraines become more noticeable after starting school. The frequency of migraine decreases at the weekends or in summer holidays but it can also be the other way around. Headache is not an excuse of children not to go to school.

As my all family members have migraine, my son is also prone to migraine. When he was in kindergarten, he used to complain like "Mum they are making so much noise". He used to get so disturbed by food smell. He didn't prefer to speak in the car and sleep or stay calm. For the first time in his year end school performance — very noisy environment—he came off the stage, saying that he had headache. I immediately moved him away from that environment. His headache didn't continue.

For my son, school is a boring place. He always has trouble going to school. He pushes his luck not to go to school every morning. He makes up excuses like feeling a bit sick, not feeling well and having a stomachache but never uses headache as an excuse. He was going to celebrate his birthday with his friends in the kindergarten some years ago. He was so happy and excited. On the way to kindergarten, he said to me, "Mum, I have headache". I told him that we could return back home as we would have the celebration in the afternoon. He spent the morning resting at home. His headache didn't continue.

As in my son, pleasant or exciting events can trigger headache in children. If your child tells you he has a headache, give him some time to rest and sleep. Observe the kind of events triggering his pain and try to move him away from that environment if possible.

Childhood migraine can occur at any age but it increases after the age of 12. It is even observed at the age of one. However, it becomes more noticeable after starting the school. In my opinion, gaining the ability to express themselves plays a part in it.

"My daughter's migraine started when she was one. She feels dizzy at the start of an attack. While playing, she stops it saying 'Mum, my head is turning around'. I can see that she is in a bad state as she becomes all pale and white. Then she says 'I feel unhappy, I have headache'. She lies down and vomits. She cannot tolerate any sound or light. She only asks for water. She goes back to normal the next day."

"My pain started in kindergarten. It started to get more severe in the eight class. It is always the same place....I have pain in the right side of my head, my forehead and on top of my eye. If I play computer games for long time, I get headache after the first hour. I get headaches at least three times a month. When I have migraine, light and sound disturbs me and I want to sleep in a dark room. I also find the smells very disturbing as well. I sometimes throw up. When I was in the school minibus on the way to the kindergarten, I always had carsickness. I had nausea and headache. Now I get carsickness and may have headaches as well."

Asking my adult patients the onset of their migraine, I receive answers like 'It started in high school, university and after university when I started working.' I change the question and reask, 'It doesn't necessarily have to be a migraine. Do you remember having headaches in your childhood?'. This time I receive answers like, 'Yes, I think I got headaches as a kid but in those days I had sinusitis, that was why I had headaches.'

Before starting the school, I also had migraine attacks —which in those days we couldn't understand what it was- accompanied by vomiting. I remember having headaches and vomiting twice or three times in my years of primary and secondary school. When I was in college, I would get headaches on and off. The first years of my proffession as a doctor I started to have typical migraine attacks. I could say my migraine had started at the age of 24, but I realized the

fact when I asked my patients. One summer night, my father took me to a hospital in Muğla. I remember showing my temple and telling I had pain and a sinus film was taken. This was all that could be done in 1970's. If it had happened now, they would use MR scans. With time I came to realize that my migraine attacks which involved being sick continued in my years of primary and secondary school. As I didn't exclaim I had headache in those years, I wasn't diagnosed with migraine. It is important to learn the onset age of migraines. If the initial period of migraine is detected correctly, the interference field related to that period can also be defined. As headaches in children are not very severe, incorrect diagnosis like sinusitis (he may as well have sinusitis) shouldn't mislead doctors. If the story of migraine is obtained correctly, no point will be skipped in the treatment plan.

In preschool and elementary school period, -especially in common migraines and migraines with aura- tonsil region is almost the only interference field. Pharyngitis, angina, tonsils and throat inflammation -whether these illness occured many times or not- cause interference fields.

Neural therapy should be used primarily in children with migraine. Neural therapy can be applied from the age of 7. Neural therapy can also be applied to children below that age but I would prefer that the child understands the therapy and accepts the treatment willingly. Families can make pressure to start the injections early so that their child can recover as soon as possible. In this case, the child starts to develop hidden fear. It is better to have some conversations to gain his trust before applying the injections. The treatment should begin slowly and patiently. Migraine in children can be treated by treating tonsil interference field with one or two applications.

## What are the rare migraine types in children?

Migraine in children can be seen in different forms reoccuring at regular intervals (periodic). Alternating hemiplegia is a severe and rarely disorder which is seen in children before 18 months of age. Hemiplegic migraine attacks are similar to complicated migraine in adults. Temporary numbness, weakness and speech impairment can be seen.

"My daughter is four years old. She has been having attacks since she was two. At the beginning she has nausea and feels dizzy. Her face turns white. She has temporary loss of vision. She loses sensation in her right arm and leg. She cries saying, 'Mum, I don't feel my arm. I can't see'. Meanwhile her headache starts. When it first happened, it went on for an hour and then got better. She had to stay in hospital. She went through some medical examinations in the hospital, but nothing could be found. It reoccured six months later. It happens twice a year. We were told to take her to the hospital immediately when it happens again, but they don't really do much. When my daughter is ill, she doesn't want to be touched or move. That was why we didn't take her to the hospital again."

**Recurrent extremity pain** occurs in school age children periodically. Leg pains are very disturbing. These pains not having an explanatory cause are not taken into consideration and considered as growing pain.

Many migraine patients remember having growing pains during childhood when asked. On some days, my leg pain towards the end of primary school was unbearable. Some nights I remember I wasn't able to sleep because of the pain and needed to move my legs constantly. As I whined too much, my mother took me to a doctor. The doctor said, 'Your child is very healthy. There is nothing wrong with her. It is only growing pain and will go away.' When I think backwards in time, I remember my throat infection getting worse in those years. My migraine attacks including nausea before school turned into repetitive extremity pain and occasional headaches. It would turn into migraine at adult ages.

In all child migraines the interference field is mostly throat area. This field also causes leg pain in children and restless leg syndrome at adult ages.

When your child complains of leg pain and discomfort it is easy to pass this pain off as growing pains. Do not ignore this pain or assume that it is nothing but a natural process.

# A story of migraine accompanied by vomiting

### Before the treatment:

"My daughter has stomachache and nausea. Her hands and feet get icy cold and she gets a fever. Thirty minutes after the onset of her stomachache, she gets worse. She lies down the whole time and doesn't say a word. She cannot eat or drink anything. Even a sip of water makes her throw up. Warming her up with a hair dryer sometimes helps. She vomits constantly for four days. There are times when we have to take her to hospital to be put on a IV. Four days later, she returns to normal completely.

She refused to breastfeed after 15 days when she was a baby. She was a baby in pain, constantly crying even at nights. She vomited at intervals until one year old. From the age of one, she used to lose herself for five minutes which was followed by vomiting. From the age of three, she suffered from serious vomiting attacks which occured 4-5 times a year. She was seen by a child neurologist at the age of six. We were told that she had an abdominal migraine. She started the medication used to treat epilepsy. The frequency of her attacks went down to once a year. Now she is ten years old. Despite this medication, she has attacks every two months. We are so desperate. My daughter is suffering."

#### After the treatment:

"The doctor told us that the problem originated in the umbilical region and applied neural therapy to this area. After the treatment, the doctor recommended us to stop taking the medication by slowly tapering down the dosage. When entering autumn, my daughter used to have an attack without fail. She hasn't had one this year. My daughter says 'I am healed and happy.' She really has changed a lot. She has become a cheerful and social kid. She used to be so quiet and withdrawn. Like other kids, she can play with ease. Even her teacher at school has noticed the difference in her. She used to be successful in her lessons but now she has become even more successful, more active and happier."

# Are repetitive vomiting attacks in childhood actually migraines?

Under the headline of migraines equivalents in childhood, there are some conditions exhibiting themselves in a form other than headache. Repetitive vomiting lasting for a few days and **periodical vomiting attacks** can be seen. If only abdominal pain occurs, it is called **abdominal migraine** or **periodical abdominal pains**. Periodical repetition, having no explanatory cause, motion and stimulus in the environment causing discomfort are the common features.

The interference field in these patients is umbilical region. It is remarkable that most migraineurs suffer from colic, vomiting and restless crying episodes during their infancy and develop constipation problem at their adult ages. Most babies with colic develop migraine at later ages in their life. Therefore, the symptoms of colic can sometimes be considered as a migraine equivalent.

Abdominal pain is sometimes presented as primary symptom of a migraine attack. The interference field of patients with this condition is their umbilical region. Our first scar (healed scar) tissue is also our abdomen. Neural therapy should be started in this area. In the following sessions, tonsil field which is the most common interference field in children can also be treated.

Having migraine can make a child withdrawn and unhappy. You may think like 'He suffers from migraine three or four times a year. Otherwise he is fine'.

When I asked the child mentioned in the story above who suffers from vomiting attacks 4-5 times a year, he seems to have no other complaints. After the treatment, big changes in the periods between attacks have been observed. What has got better, his attacks in between which he hasn't been able to express, his fear of next migraine or his anticipation? What was making him so miserable? In my opinion, removing the pressure on the organism by treating the interference field played the major role. Treating interference fields can make children become healthy and happy as how they should be.

## An adolescent migraine story in young girls

### Before the treatment:

"My pains first started when I was in secondary school and got worse gradually. For two years I have been getting pain nearly everyday, it becomes rarer for two or three months and it's frequency reincreases. Pain on either right or left side strikes in my temple and my eye and is very severe. I also get neck pain and sick each time I have pain. Because of suffering from pain, I couldn't study properly for the university exam."

### After the Treatment:

"The cause of my headaches was my wisdom teeth. They were removed one by one and my headache completely disappeared. My doctor first had the upper wisdom teeth removed. My period used to be so painful and distressing. My upper wisdom teeth were the cause of it. Indeed, my period pain went away afterwards. In the following months, my distress before my periods also improved. I don't even notice my period is due to start. I wish I had had this treatment last year. If I had had it, I could have studied harder for the exam."

## **Adolescent Migraine and Treatment**

Most migraineurs begin to experience attacks in high school or towards the end of secondary school. After ongoing severe attacks for 3-5 years in this period, attacks reduce in frequency. In mid thirties headaches worsen. In some cases, headaches have always been severe even in the first attack experiences. And in other cases, the attacks can occur intermittantly in adolescence period and their frequency can increase in the following years.

Migraine which begins in adolescence has the characteristic of migraine without aura. It is one sided –sometimes left, sometimes right-throbbing pain which is sharp in temple and can also involve the pain in the eye. Moderate nausea, sometimes vomiting and sensitivity to light and sound can occur. School and exam stress can increase the severity of pain.

Migraine begins with the first menstruation in almost all girls. As well as distressed, painful and irregular bleedings and policystic overgrowth, hormonal disorders can also accompany migraine.

"I was going to the course the first time I had headache. Since then my headache almost has never gone away. I was told it was due to stress of the exam. After coming back home from the course, I wanted to study, but I suffered from headaches. I turned off the light and went to bed. I couldn't do well in the exam and had to start studying in a regular high school. Even though I didn't have to study much, I still got headaches. When I started my second class in high school, I still had headaches. If it had gone on like this, I wouldn't have been able to study for the university exam. As you have asked, I have irregular and painful periods, and I am becoming very hairy. My mother took me to a gynecologist who told me I had cysts in my ovaries and had to use birth control pills."

Girls having regular menstrual bleeding and remain untroubled by their periods don't have migraine. The cause of adolescent migraine is not because hormonal activities commence. The cause that initiates migraine and disrupts hormones is the same: Wisdom teeth. Wisdom teeth causing negative stimulus, namely interference field both trigger migraine and exert pressure on hypophyseal functions. The pituitary gland which is the main control center of hormones is localized behind the bridge of the nose. Wisdom teeth in particular affect pituitary negatively. If they are easy to come in, mild menstrual disorders can occur. If the teeth are too big, inside the jaw bone, in horizantal position, and never can come in completely, they have a serious effect on hormones. As wisdom teeth affect the rest of the teeth, if these teeth are not removed, hormonal disorders may persist throughout these patients' lives.

Another typical characteristic apart from hormonal disorders is the course of attacks. Although attacks cause constant headache, they mostly intensify for a few weeks in 2-3 month cycles. This condition is due to wisdom teeth trying to come in 2-3 month periods at intervals. In the periods of their movement, the effects of interference field and migraine attack frequency increase.

"My migraine started when I was in secondary school. I sometimes had one or two attacks in a week. Following a week with migraine, I had a few headache-free month periods which enabled me to forget the pain. However when I had migraine attacks, my attacks occured one right after the other. I don't remember suffering from this kind of pain in my university years."

In male adolescents, wisdom teeth cause problems at the end of high school and in the first years of university and as a result, similar common migraine attacks without aura occur. The cause of confusional migraine which is a rare migraine variant and seen in men can be wisdom teeth. Patients with confusional migraine develop aura followed by state of mental confusion. The adolescent can become a completely different person with increased agitation and can treat people badly, speak abusively, use slangs and show disorientation in time and space. This condition is out of control and can continue during headache. If these attacks happen without headache, it may not be understood that the young man is having a migraine attack.

As migraine affects the autonomic nerve system, sweating is one of the symptoms. In this type of migraine which is seen only in men and starts with sweating, it can be more difficult to diagnose it.

"In the first year of college, I used to wake up with excessive sweating and distress. I couldn't understand what was going on. The condition lasted for half an hour and then improved. The doctors couldn't find anything. This situation continued for a year with repeated attacks once or twice a month. Following sweating and distress, I started to get severe headaches. And then I was diagnosed with migraine."

The cause of the mentioned paient's migraine was his wisdom teeth. Following the surgical removal of his wisdom teeth, his sweating and headaches improved. Instead of viewing migraine as headache, if it is approached from autonomic nerve system perspective, symptoms like unexplained sweating, intense distress, vomiting and behaviour changes —even without headache- can be considered as migraine attacks as well. Even though migraine attacks in adolescent are severe, the solution is easy. First of all, the relation of migraine story with wisdom teeth should be considered. If the characterics of migraine correspond to interference field effect of wisdom teeth and patient does not have wisdom teeth, other interference fields (trauma to the front teeth in childhood) which are rarely seen, should be investigated.

## **A Story of Menstrual Migraine**

## Before the Treatment:

"My migraine started in my college years. My headaches are associated with my periods. I am aware of this link even from the beginning as I get migraines before and after the menstruation without fail. If I have too much stress in between the periods, I also have headaches. I have very severe migraines during my period. Medication doesn't help, I get sick and sometimes vomit. I used to have headaches when I was a kid, but they weren't so severe. Before migraine, I sometimes see bright points of lights and threads before my eyes. It lasts a short time and then gets worse afterwards.

As you have asked, I have always felt bloated and angry before menstruation since my first period. My bleeding which was normal before the birth increased after the birth as I had coil inserted. You are right, I didn't have any headache during my pregnancy. I didn't get headaches even one year after birth. It restarted afterwards. I suffer a lot 3-4 days before and after menstruation. I want to get rid of this situation."

## After the Treatment:

"I went to the clinic to have the treatment but to be clear, I wasn't expecting to be able to get rid of migraine. I heard about the hormonal contraceptive coil which stops you having periods. When I told my doctor that I was thinking to have it inserted, she said, 'Do you want to enter the menopause at a young age? You have always had hormonal issues as you always feel angry and bloated during your menstruation period. Hormones being given to your body will make things even worse.' She told me about her patients not being able to have periods in spite of trying similar methods and their migraine attacks increasing in frequency and spreading over a whole month, as result. She told, 'We shall resolve the causes affecting your hormones and creating your migraine'. She applied some injections to certain areas on my body, detected what dental treatments to be done and refered me to relevant specialists. I had my coil removed as she advised. I don't have headache anymore. My premenstrual syndrome and bleedings have improved. I feel like a healthy woman."

## **Menstrual Migraine and the Treatment**

Young women make up a large portion of migraine sufferers in society. The most common migraine among women is menstrual migraine. In majority, headache occurs only during the period of menstruation and some of them may also experience in between two periods. Attacks during menstruation are more severe than those in between and do not respond to medication. Migraine attacks generally occur a few days or even a week prior to bleeding. While in some cases, migraine attack stops with the onset of a period, in other cases it can continue through up to some days after menstruation. Some sufferers experience migraine only during bleeding or towards the end.

"I don't even have to check my diary to see when my period is due. Three days prior to my period, I start to feel bloated, tense and nervous. I also get severe headaches. When my bleeding starts, my headache and bloating goes away."

"I get headaches one week prior to my period which continues through up to four-five days after my period. Half of the month passes this way. Whenever I think my headache has passed off, I enter into another phase of pain. I have never got headaches during my pregnancy. I was so pleased. I sometimes consider giving birth again just to get rid of my headaches for some time."

Menstrual migraine often starts with the first menstrual bleeding. In some cases, menstrual bleeding has been problematic since the first period and migraine starts to occur in mid twenties. Some patients have been getting headaches since their childhood. And there may be some patients who notice the link between migraines and menstruation afterwards. Women with the mentioned conditions have more or less hormonal imbalance.

Sudden changes in hormones during menstruation is thought to be the reason why migraine in women is experienced more frequently than migraine in men; but it isn't. Actually sharp changes in hormones affect the organism and trigger migraine –just like hunger, wind and wine-. In order to control migraine, the common causes of hormonal imbalance and migraine should be treated. If menstruation migraine started at early ages, the interference fields affecting pituitary glands should be examined. Wisdom teeth are the most significative interference field in this age group.

When these patients consult physicians at older ages, they may also suffer from headaches similar to tension headaches which don't interfere with daily life. They mostly had their wisdom teeth removed. Subsequent surgeries (especially gynecological ones) and their past dental treatments should be examined.

If the very frequent attacks during the treatment process are reduced and headaches during mentstruation continue, it is necessary to correct malocclusion of teeth with the treatment of bruxism.

## A Migraine Story Beginning with Birth Control Pills

### Before the Treatment:

- I am 30 years old and I have never had headaches until I was 25 years old. I have had headaches in my every period since I was 25. It is a terrible pain making me thoroughly wretched. Most of the time I cannot even go to work.
  - What happened at the age of 25? What changed in your life?
- I started to work and it was very busy. As you know banking is a stressful profession. Nothing really happened except that. I got married the same year, so I was very happy.
  - Did your headache start after you got married?
- I think so...But my marriage didn't make me stressed at all. I married out of love. My husband was so understanding. After returning back from honeymoon, I had my period and experienced my first migraine attack.
- How were you protected from pregnancy? Did you use birth control pills?
  - My husband used birth control. I did not use birth control pills.
- Before the onset of headache, did you experience bloating, irritability, tenderness and pain?
- Yes, I still do. It got even worse after getting married. During bleeding, I get swelling in my whole body, I feel nervous, get headaches and have period pain. I was told that these problems would end after getting married.
- Are you sure that you have never used hormone pills such as birth control pills or period delay pills?
- I only used them once one month before getting married. I stopped using them as I don't like using pills. I don't think that counts, though.

### After the Treatment:

"I was very surprised to hear that birth control pills which I had used only once caused my migraine. But if I hadn't had any hormonal problem before, -apparently, my period pain was the indicator of the problem- I wouldn't have experienced this problem. The most important cause was my wisdom teeth. I had neural therapy treatment and my wisdom teeth were removed. Now, I have gotten rid of both my migraine and my period pain which I was previously told would go

away on its own after marriage. I sometimes get headaches but I have my periods without having premenstrual symptoms and being distressed."

## **Migraine Beginning with Hormonal Medicine**

Changes in a woman's hormones happen during the monthly cycle. Ovulation occurs in the middle of the month. If pregnancy has not occured, progesterone hormone increases. After the two weeks of intense growth of progesterone hormone level, it suddenly falls. Bleeding occurs within forty-eight hours following the drop of progesterone. Estrogen level is also minumum in this period and increases with bleeding. The sudden changes in hormones during menstrual period are thought to be the cause of migraines and hormone replacement therapy has been used but the therapy hasn't been successful in controlling migraine.

The sharp change in hormones is not the real cause of migraine, it is only a trigger. If patient has hormonal imbalance and predisposition to migraine, hormonal fluctuations can iniate a migraine attack. Hormones given externally can distort the balance artifically and initiate migraine, increase the severity of the existing one and spread the pain over time. This condition is more common among women using morning after pills or period delay pills. **Even if it is used only one, contraceptive pill can initiate migraines.** 

Hormonal imbalances occur in almost all women. This commonly accepted condition is called as premenstrual syndrome (PMS). Along with fluctuations in feelings such as sensitization, touchiness, tension, tendency to cry, irritability and depression, PMS also causes feeling of tiredness, tendecy to oversleep, lack of interest in your surroundings. Swollen and tender breasts, edema and fluid retention may occur in the body. PMS can also include nausea, vomiting, constipation, diarrhea, increased appetite, alcohol sensitivity, excessive thirst and increase in sex drive. It can also cause acne breakout. What causes PMS cannot fully be explained. This condition is actually the sign of hormonal imbalance. These symptoms are not a normal part of women's life.

Hormonal imbalance should be corrected in the treatment of these patients. As well as neural therapy, tooth-jaw complex interference fields affecting the pituitary negatively should also be examined. Patients should be advised not to use hormonal drugs such as period delay pills and birth control pills.

## **A Story of Migraine in Pregnancy**

#### Before the Treatment:

"I am 28 years old and 8 weeks pregnant. This is my first pregnancy and I have been suffering for 8 weeks. I get headache and nausea everyday. I would have headaches before pregnancy which would go away with medication. I cannot take medication now due to my pregnancy. My doctor prescribed some basic painkillers. I take 4-5 tablets a day but they don't work. In the past, when getting migraine and delaying to take my medication, I vomited. Now, I constantly vomit due to both my headache and my pregnancy. I couldn't even feel excited about my pregnancy. My pregnancy is like a nightmare. I don't know how I can cope with it for 9 months."

#### After the Treatment:

"I didn't know how to get out of this situation. Following the first session, my pain level was diminished. I was able to breathe easy. I was so relieved after the injections applied in the first sessions. My headache went away although I wasn't on any medications. I wasn't throwing up because of migraine. My morning sickness was also reduced. I didn't experience any problems in the following months of my pregnancy. I had an easy pregnancy. I am a happy mother now."

### What to do if Migraine Attacks Continue in Pregnancy?

Migraine is a major problem seen in every three or four females in the reproductive age group. Severe migraine attacks and continuous use of medication concern every future mother. Not being able to use medication during pregnancy leads to a further growth of the problem.

"I am 35 years old. Most of my friends gave birth. I have been married for 7 years. My husband and I want a child. I frequently suffer from migraine attacks. I am so scared to get pregnant. What am I supposed to do when I get pregnant? I cannot cope with migraine without taking medication. I should solve my migraine first."

Headache during pregnancy is reduced by 70 percent. Migraine attacks can completely disappear after the first three month period. However, in some cases, migraine attacks continue, in very few cases they can increase and in rare cases headaches can start during pregnancy.

"I am 6 months pregnant. I have a terrible headache. I sometimes have migraine attacks once or twice a week. I can't take pills. I go to the hospital to get an IV drip. I was told my migraines would be diminished after the first months but it didn't. My migraine continues as before my pregnancy. The only difference is that I am admitted to hospital more often as I cannot get any medication. I couldn't enjoy being pregnant."

"I have had migraines for long years. I felt most at ease during my pregnancy. Apart from a couple of headaches in the first months, I didn't have headaches. I started to get headaches with my first period following my delivery. I sometimes say to myself, I wish I were pregnant."

You cannot take medication during pregnancy but you can still have treatment. The most appropriate treatment during pregnancy is neural therapy. The small injections applied on the skin (short acting local anesthetic) provide a general relief. A small amout of medication used does not harm the baby.

The interference field of female patients whose migraine continue during pregnancy is generally throat region. Neural therapy is applied on this region to comfort the pregnant woman and the treatment can be carried on after birth.

Future mothers should ideally treat their migraines before planning their pregnancy. Pre-pregnancy treatment becomes even more important especially for those who use almost daily medication.

Migraines can rarely begin in pregnancy. However, if headache starts in the third month of pregnancy called the third trimester, especially after the 30th week, this symptom can be associated with preeclampsia. Increased blood pressure and edema develop in preeclampsia which is a kind of pregnancy poisoning. Most of the patients with eclampsia have headache coming from the nape.

Constant headache symptom with an unkown cause in pregnancy should definitely be considered as eclampsia. Headache on its own even without high blood pressure can also be the only symptom of eclampsia in patients with high probability of developing eclampsia. A pregnant woman who is a migraine sufferer can also develop eclampsia. If constant headache and pain under the right rib cage occurs, the sufferer should consult a doctor immediately.

Dural venous sinus thrombosis which rarely develops in pregnancy is a very serious condition. Some people have genetic factors that increase blood clotting. Hormonal changes in pregnancy reveal this tendency. Clotting occurs in the veins of the brain causing the blood flow to the brain to deteriorate. Headache is usually accompanied by neurological symptoms. Even if permanent headache is the only symptom, this serious illness should also be considered.

## A Migraine Story beginning after a Cesarean Section

#### Before the Treatment:

"I delivered my baby by cesarean section. After the birth, while breastfeeding my baby, I had a very severe headache for the first time. I felt nauseous, vomited, had diarrhea and broke out in a cold sweat. I had a throbbing sensation in my temples. Since then, I have been suffering from attacks like this in my menstruation periods. I cannot get out of bed for two days in these days. Before the delivery, I used to have headaches as well but it would go away after taking medication."

#### After the Treatment:

"The cause of my illness was cesarean section. I found it odd as nobody had told me about it before, but my headaches started after my delivery. I told my doctor that I had some friends who had given birth by cesarean section and didn't have migraines. I have a genetic predisposition for migraine. My mother had headaches and my aunt also suffered from attacks like mine. I had my tonsils removed when I was a child. According to my doctor, If you have a predisposition to migraine it usually reveals itself during childhood. I never experienced migraines in childhood so I wasn't predisposed to them.

She applied injections on both the tonsil region and c-section area. It was unbelievable that my pain went away."

## Is there an Association between Migraine and Cesarean Section?

In evaluating headache and migraine, headache chart prepaired with a detailed life questionnaire is very important. Sometimes, patients clearly express the time pain starts. Most of the patients who clearly states that their migraine began with delivery, gave birth by cesarean section.

"I didn't know what headache was until my son was born. I started to get headaches with his birth. I have been suffering from migraines for 5 years."

If a patient gets daily headaches which are persistent in one side, it is necessary to investigate the different causes, but in headaches affecting the whole head and forehead area, gynecologic region should be considered. Normal delivery never creates interference fields. Cesarean section and a postpartum intervention like coil placement cause interference fields. It is a priority to treat the gynecologic region interference field with neural therapy in these patients.

If headache is persistent in one side and the patient gave birth by cesarean section, gynecologic region is not the main interference field. These patients could have migraines before pregnancy which weren't considered important. Since pregnancy can cause tooth decay, the teeth on the side of the pain should be evaluated first. Primarily, dental treatment should be provided which should be followed by the treatment of cesarean section.

### Migraine and Headache in the First Days of Postpartum

The most common cause of headache in the postpartum period is birth by epidural anesthesia. In this method, which is widespread under the name of painless birth, cerebrospinal fluid (CSF) leakage can develop. Due to fluid leak, the pressure in the brain is reduced and headache develops. The typical feature of the headache is that the pain is either reduced or goes away completely while lying on one side. At the time when mother sits to breastfeed her baby, negative pressure in the brain caused by the effect of gravity increases the pain. Headache goes away after drinking lots of fluid, bed rest and lying flat apart from brestfeeding for a few weeks. Caffeine can be given as a medicine if headache is unbearable. 'Blood patch' can be performed if the severe pain still continues after three days. In other words, the patient's own blood is injected into the spinal epidural space.

'Dural sinus thrombosis', which is more rare and a very serious condition is more likely to occur in post partum than pregnancy period. Headache can signal dural sinus thrombosis which manifests itself with symptoms like eye edema (which can only be detected by the doctor) and focal neurological deficits such as epileptic seizures. Anticoagulation treatment should be started urgently.

Headache starting on the first days of postpartum requires careful assessment. First of all, it shouldn't be taught that migraine experienced previously is recurring. Mothers who suffer from the pain of a migraine should refrain from avoiding İT. All too often migraines are passed off simply as the common headache and ignored as an annoyance which will soon pass.

## A migraine story of a Nursing Mother

#### Before the Treatment:

"I had menstruation migraine since my high school years. I got migraine a few times during my the first months of my pregnancy which disappeared after then. I gave birth four months ago. My pain has recurred since the last month. I had two serious attacks last week. I couldn't get any medication as I was breastfeeding. If I delay taking medication during a migraine attack, I end up vomiting and being hospitalized. I don't know how to cope with it without taking any medication. I want to breast-feed my baby until at least one year old. If it continues like this, I might have to stop breastfeeding.

#### After the Treatment:

"While I was thinking of what to do, I came across to this treatment on the internet. To be honest, at first I didn't trust it. I called the doctor who told me that the treatment could be applied while breastfeeding and wouldn't harm the baby. With the treatment, my attacks stopped. I breastfed my baby without any problem until he was fifteen months old. It was so fortunate that I checked on the internet that day."

### What to do for Migraine Attacks in Nursing Mothers?

Migraine causes serious problems for nursing mothers as migraine is common among women of childbearing age. Taking medication is the first thing to do if headache is so severe that it affects the life of the sufferer. Almost all the medications pass through the breast milk. As nursing mother cannot take medication, her pain keeps getting worse. Sleeplessness and tiredness caused by caring for the newborn also trigger her pain which makes the mother unable to care for her child. If the child has colic, the situation becomes even more difficult to cope. Both the child and the mother get into a very difficult situtation. **The most appropriate treatment in this period is neural therapy**. As well as pregnant mothers, neural therapy can also be applied to nursing mothers.

The course of migraine attacks should be carefully interrogated and primary interference fields should be detected. Instead of standart treatment, primary interference fields should be treated. The treatment should be performed without the mother having to come to the clinic with her baby several times.

Should the ongoing migraine attacks increase in frequency, tonsil area is the interference field and she can recover in a short time. Should the attacks be persistent one-sided and involve pain in the eye, teeth should be examined. After the assessment of panoramic dental x-ray, the mother should primarily be referred to a specialist dentist.

If headache has increased compared to prenatal period and the side of the pain has changed and pain has developed into typical migraine, the interference field is generally caesarean section area. First of all, neural therapy should be performed on the c-section scar.

If the target interference fields are detected carefully, the condition of the mother improves in a short time. This doesn't mean that the treatment and migraine are over. The treatment should be continued after the period of breastfeeding with short intervals is over and the mother starts to feed the baby with supplementary nutrients. If the baby is colic and cannot sleep, colic can be treated with neural therapy easily. Thus, both the mother and the baby are relieved together.

## A Migraine Story of a Young Girl with early Menopausal Symptoms

#### Before the Treatment:

-I am 31 years old. I have been suffering from migraine pain once or twice a month for 4-5 years. I sometimes feel sick and vomit along with pain. I get pain in the frontal part of my head and forehead starting from the root of my nose. My head feels jammed with too much pressure.

## -Did you experience any problems such as accident, surgery or abortion during or after university? Do you have any other health problems?

-My periods have become very irregular in recent years. I have a very early menopause. I can have scanty periods only with hormon medicines. My gynecologist told me that there was nothing to do about it.

## -Was your bleeding a problem in the first years you started to menstruate?

- -Yes, it was very painful, irregular and light since from the beginning.
- -Have your wisdom teeth come in?
- -I was told by my dentist that I had not developed any wisdom teeth at all.
- -Have you fallen or experienced any illness since childhood?
- -I haven't had any complaints other than my headache and menstrual problems.
- -You suffered a blow to your front teeth when you were a child. Maybe it happened during a fall.
- -Oh, yes I forgot. I fell off my bike when I was 5 years old and my front teeth were broken. I had root canal treatment and tooth root operation. I don't have any problems now. How did you understand it? I am very pleased with my teeth and don't want to have them corrected.
- -The cause of your irregular hormones and your migraine should be your front teeth as you don't have wisdom teeth. You may probably need to have your root canal treatments redone. Aside from migraine, do you want to enter menopause at a young age?

#### After the Treatment:

"I went to the clinic for my migraine to be treated but the surprise of my life was not entering menopause. Falling as a child triggered this condition and I was stunned that such an ordinary incidence could have been the root of my problems. It was so long time ago that I forgot. My root canals were redone and my teeth were corrected. My doctor told me that we would constantly monitor my hormone levels and even if I had no headache, but irregular bleeding and decreased bleeding, the treatment should be continued. I don't get migraines anymore and have regular periods."

## Migraine and Early Menopause Treatment without Neural Therapy

When evaluating migraine, I mentioned the importance of migraine timeline many times. Sometimes an interference field can cause problems many years later like a trauma experienced at the age of 5 causing migraine at the age of 26. When the interference field related with the period migraine occured for the first time, it is necessary to go back in the timeline. While doing so, the relationship between the characteristics of the patient's complaints and the interference fields which might have occured in the past must also be taken into consideration. Thus, even some events from the past causing interference fields can be reminded to the patient.

The pituitary gland located just behind the nose, is the main control center of hormones. Since the pituitary gland is located in a very protected area, it is very unlikely to suffer an external damage. However, when we think in terms of interference fields, pituitary function can be disrupted by adjacent structures. In women, hormones constantly changing in the monthly cycle are greatly affected by this condition.

Mutiple and different interference fields can also have an effect on early menopouse. In the process of treating the underlying causes of migraine, the causes of hormonal disorders are also eliminated. Considering the number of patients with premature menopause are increasing, we can say that if women with migraine are treated with Gökmen Approach, early menopause can be prevented in some of them.

When assessing the patient, I never give up following my motto which is 'If there is a problem, there is a cause to explain it.' As long as the cause and effect relationship is established properly, my motto can even remind the patient the things he forgot.

### **Migraine Treatment During and After Menopause**

All women with migraine dream of getting rid of migraine with menopause. Monthly hormonal cycles become inapparent with menopause. Sudden hormonal changes which trigger migraine do not occur anymore. The migraine prevelance decreases after age 50 and menopause plays a major role in this. If sufferer has women in their family whose migraine vanished after menopause, their expectation is even greater.

Waiting for menopause to get rid of migraines is not a correct approach as migraine may not improve but can get worse. The fact that her mother's migraine disappeared after entering menopause doesn't necessarily mean her daughter will experience the same thing. Migraine susceptibility passes through the family. Interference fields also determine the course of migraine. In addition, while waiting for menopause to get rid of migraines, the time loss caused by migraine attacks experienced is not so short. The occurence of two attacks per month means losing one month in a year.

Did the sufferer enter menopause naturally? Was her womb removed in her forties due to a problem like myoma. How did hormonal changes affect her premenopausal migraine? Did she have more gynecological interventions than her mother or women in her family? How strong is her migraine genetic background? The anwers to all these and similar questions affect the course of the disease.

Even though she doesn't get migraine attacks any more thanks to menopause, it does not mean she has recovered from it. The cause creating migraine triggers other illnesses. It does not mean you have recovered because you don't get any headaches anymore. I would like to mention my mother's condition to exemplify this situation.

I remember my mother tightening her head with a muslin when I was a kid. In my fifties, I didn't see her like this anymore, but she had more serious illnesses (hypertension, goiter, rheumatism, vertigo attacks). I wish she had only migraine as she did before menopause instead of these diseases. In fact, the interference fields causing her migraine and causing most of her illnesses after menopause were the

same. Along with menopause, the appearance of the disease changed and became more severe.

Migraine is reduced in menopause. However, if a migraineur enters an artificial menopause, there is virtually no chance of her migraine to reduce, on the contrary, her attacks will worsen. Benign tumors such as myomas usually develop in the uterus in women in their forties. The major problem these illnesses cause is increased bleeding. If the patient has already had children and doesn't expect to become a mother again, instead of correcting these problems, removing the womb and in some cases ovaries as well is planned. The possibility of the patient developing cancer is removed, but the surgical application creates a new interference field causing migraine to get worse.

"I am 52 years old. I have been suffering from migraine for years. I used to have a migraine crisis in all my periods with no exception. I was hoping that my pain would go away with menopause. I had increased bleeding problem due to my myomas. My doctor told me that my ovaries should be removed and I would enter an early artificial menopause. I was so pleased to hear that hoping to get rid of migraine as a result. I accepted to have the surgery. But it didn't happen. My pain has gotten more severe in recent years. At least, I used to get migraine once a month and I knew when it would come. Now I have more frequent migraine attacks and it is not clear when they will happen."

Each interference field in the entire life story of a migraineur in menopause should be evaluated. As the age progresses, more interference fields are added to the picture. The treatment should be applied according to the order of priority. In particular, if the pain gets worse after a gynecological intervention, priority should be given to this region.

## A Story of Advanced Age Migraine

#### Before The Treatment:

"I am a 76 year old retired teacher. My headache started in my fifties. Even though I didn't think about retiring, I retired because of my headaches. I have a severe headache once a week which doesn't allow me to get out of bed. My head feels so heavy that I find it difficult to hold it up. My migraine experience which I have just mentioned is a sample of a severe attack which lays me low. My head feels so heavy like a basket even when I don't get headaches. Apart from headaches, I am so healthy. I had xrays taken and I was told that I had arhtritis neck and small hernias which are not important for me. I thank to my God for not having any heart disease, diabetes or blood pressure but this headache made me tired of life. Sometimes I say to myself I wish I didn't have headaches but other illnesses instead. It is so hard to live with the feeling of your head being heavy. I can't enjoy life at all."

#### After The Treatment:

"My womb was removed in the past years. The doctor administered injections on my surgical wound. My dentures were unbalanced so they were changed. After the first injections my severe crises disappeared. I started to wear my new dentures and both my headache and neck pain decreased. I am so healthy now. I can even start teaching again."

## How to Approach Migraines Beginning at an Advanced Age?

Migraine is less common in the elderly. It is 3-4 times more common in young and middle aged women than men. It is only twice more common at older age. However, migraine can also start after menopause. Gynecological operations in forties are generally the cause of advanced age migraine.

If the patient is a male or a female who hasnt undergone any gynecological surgery, dental-jaw complex should be examined. In particular, it might be necessary to balance the dentures. Old people may not be willing to change the dentures they got used to. Even though they get rid of their headaches, they may still express their discomfort with new dentures.

If headache begins at an advanced age, brain tumors (metastatic cancer) spreading from another region, metabolic diseases such as temporal arteritis, glaucoma and hypothyroidism should be investigated. It should be considered that hypertension, heart, stomach and COPD medication commonly used in the elderly can also cause headaches.

The use of migraine medications is the second important point to be considered in the elderly. Medication should not be taken randomly with the suggestion of migraineurs in the family. As migraine medications have a vasoconstriction effect, they can cause diseases like heart attack and vascular occlusion in the elderly.

There is no difference in the approach to treatment for migraine in the elderly. Only some treatments can be more protective due to the age of the patient.

My 84 year old female patient who had been suffering from migraine since young ages was quite healthy apart from her headache. The cause starting migraine was thought to be teeth related. She had been wearing dentures for so many years. When her dental x-ray was taken, it was found out that her carnassial tooth couldn't come in and was buried in the bone. Although this tooth had an effect on her

migraine to start in her youth, no treatment was performed on the tooth. Having a surgical extraction of tooth at this age will not be easy. The pain was controlled by neural therapy which was applied to the patient. She was stated that neural therapy could be performed in the following years if the pain recurred.

Mostly, migraineurs do not have any other serious diseases (hypertension, heart disease, lung disease, diabetes, etc.) While migraine can disappear with menopause, other diseases can occur. It should not be concluded that if migraine is treated, other diseases will occur. If migraine is treated and the system is regulated by Gökmen Approach, more serious diseases will not develop. This is an observation that as there is justice and fairness in life, so too can this same fairness be found in diseases. Those who have read Hahnemann's 'The Organon of the Healing Art' can understand how energy of life acts and how the organism becomes ill.

## **A Story of Chronic Migraine**

#### Before the Treatment:

"I am 48 years old and I have headache every day, I don't have a pain free day. I have been in this situation for 15 years. My neck gets stiff and the pain in my nape goes up to my head. Sometimes I have pain in one side of my head. When I have headache, my nape gets even more stiff. My first headache started in my twenties. I was living in Ankara then. I saw many doctors and used anti-depressants and medications for epilepsy which did not eliminate the pain. The severity of the pain sometimes decreased, but when my body got used to the medication, it intensified again. I was told to learn to live like this. But, this is not a life. I am in pain all the time. I have been suffering from this condition for 15 years. I always have pain. I take two migraine medications every day. I do sports 4 days a week, drink 3 liters of water a day, take good care of my health, but I still I get headaches. My headache is severe once a week. I can cope with it only if I take two tablets of migraine medication. If I am late to take my medication, my vomiting crisis begin. If I feel the pain will be severe, I immediately go home. I cannot go out of my house including the next day. I cannot see anyone. Tension, excitement, movement, stillness, anything can trigger. Everything can be a problem for it. I do not care about it. I try to continue with my life."

#### After the Treatment:

"In short, I never believed I could be treated. The doctor told me I could, but I didn't even want to listen. I saw the doctor at the insistence of my daughter, anyway. Things started to change after the treatment. For the first time in so many years I spent two days without taking 2-3 tablets of migraine medicine and that's how I started to believe I could be treated. I needed to have dental treatment. I had my wisdom tooth removed and my pain was reduced. I also had a filling which needed changing. Because of the festive holiday, I couldn't start the treatment. And I laid low with very severe pain like before. I was so demoralized thinking I would never get better. My doctor told me to postpone my filling treatment because I was clenching my teeth. I didn't even know I was clenching, but she was right. I damaged my teeth because of it. When I started to use mouth splint, I realized how

hard I was clenching my teeth. Not only did my headaches disappear, but also my whole body relaxed. I was surprised to hear that bruxism was the cause of all this distress going on for years. At first, I didn't believe I could be treated and then didn't believe I was clenching my teeth. Everything turned out to be true. Now, I am a healthy woman who does not need to take medicines anymore."

## What is Chronic Migraine? How Should it be Treated?

Chronic migraine —especially in women- follows a remarkable pattern. Migraine starts in youth and happens once or twice a month. The frequency of migraine headaches increasing with work life and children, goes up to three or four times a month in thirties. In forties migraine headaches worsen and become almost daily. Pain killers and migraine medications that were occassionally used at young ages, are started to be taken more than once a day.

Migraine lasting for more than 15 days a month is called 'chronic migraine'. Chronic migraine, affecting 2 percent of the population, develops in middle ages. Sometimes this condition can also be seen in children or young people as well. The interference fields of chronic migraine sufferers (those with persistent headache in high school years) are usually their wisdom teeth trying to come in. As for in the middle ages, tension headaches along with migraine attacks are more commonly seen.

In chronic migraine, persistent headache leads to daily use of medication. Excessive use of medicine plays a big role in migraine becoming chronic. Therefore, it is also called rebound headaches (medication-overuse headache) or analgesic rebound (persistent headache caused by overuse of painkillers).

"Medications do not work. Taking so many medication is so harmful but I can't help it. There are days when I take four or five medicines a day. Medicines started to make me sick but if i don't take them, my headche gets worse."

In the story of patients with chronic migraine, certain common patterns like not being able to manage the pain without medication, constantly changing the medication thinking the body has got used to it and increasing the number of tablets taken daily in time are remarkable.

"I start a medication. It works for one week and then my body gets used to it and it doesn't work any more. There is no medication left which I haven't used."

"I shouldn't be taking migraine medication more than three tablets per month. General health insurance doesn't provide migraine medications so I try not to have it daily and manage it with painkillers. But when the pain intensifies, I feel the need to take it. I finish at least three or four packeges of migraine medication a month."

In the treatment of patient with chronic migraine, it is necessary to understand the patient first. Although, medication plays a major role in the severity of pain experienced, stopping medication overstrains the patient. Starting the treatment with neural therapy eases the process in these patients. Neural therapy regulates the autonomic nervous system. Therefore, as well as controlling the pain, it also regulates the negative effects of medication on autonomic nervous system. When the patient starts to have days without pain and medication, correction of interference fields in dental-jaw complex should be commenced. It should not be forgotten that the majority of patients with chronic migraine have problems related with bruxism.

If the physician achives to gain the trust of a patient with chronic migraine, very good results will be obtained. The greatest fear of patients who previously consulted physicians in this regard is that they will not be allowed to take mediation. First of all, patients must be reassured about it. At the later stages of the treatment, patients will stop using medication themselves without feeling of being deprived.

## A Story of Tension Headache

#### Before the Treatment:

"I have a constant feeling of heaviness and tension in my head. It is more like feeling of heaviness than pain.... I am fourty-four years old and I have been having this feeling since university years. In the mornings I often wake up with heaviness in my head. The more heavy my head feels, the harder my day is. When I am stressed, my head feels even heavier and I get headaches. My head feels light only in three or five days a year. I had a CT scan which showed no problems in my brain."

#### After the Treatment:

"Because of my problems, I was referred to a pyschiatrist and given some antidepressants. I didn't think I was depressed so I didn't use them. I was thinking my last doctor was going to tell me that my problem was pyschological as well. She assessed my illness from a very different approach. She mentioned the spasms in my whole head and neck muscles. Indeed, let alone my head, my body is always tense. She told me that the reason behind my spasms was my teeth clenching. It was true, I was clenching my teeth so much. I had neural therapy treatment first. In the first session, I fet mentally alert. Afterwards, a mouth splint was provided so that I could relax deeply. I wake up more easily in the mornings. Sometimes if I feel a bit stressed during the day, I may have heavy head but compared to past, I am much more better."

## What are the Characteristics of Tension Headaches? How should it be treated?

Tension headache is caused by tension in the muscles. Stress and tension are factors that exacerbate it. Tension type headaches tend to get worse towards the end of the day and the patient feels relieved while sleeping. Patients with bruxism and chronic and complicated tension headaches wake up with pain in the morning as the stress of the day increases teeth clenching.

Tension headache is the most common type of headache. It doesn't hinder daily life as it causes mild or moderate pain. Beyond headache, it is mainly defined as heaviness, tightness and pressure in the head. It is two sided and affects the whole head. Patients are aware of spasms in the muscles of the neck and head.

Tension headache doesn't have characteristics such as nausea, vomiting and sensitivity to light. Most migraine sufferers also have tension headaches. These patients have tension headaches combined with migraine attacks.

In most of tension headache sufferers have different levels of anxiety, depression and suppressed anger. They also experience different levels of difficulty in attention and concentration. Patients are aware that tension headache affects their mental and intellectual productivity in a negative way. Although not being as severe as migraine, tension headache also affects the life of the patient negatively.

"I work as a manager so I have many responsibilities. I cannot call it pain, but this feeling of heaviness in my head affects me. In the past I was able to keep everything in my mind. Now I need to take notes. In long meetings my brain gets tired so I don't even want to listen. I am still successful in my job but if my headache improves, I can perform better. I used to have a very active social life. Now I all want after work is to get home and go to bed. I don't have a clue what has happened to me. People around me don't notice it, but I can only use half of my performance while working.

Eighty percent of people experience tension headache throughout their lives. In 40 percent of these, constant and complicated tension headache develops. Taking painkillers continually plays a role in tension headache becoming chronic.

"I am told that I have tension type headache. I don't understand it. I have headache everyday and take painkillers. They don't help much. I go to work, I can't enjoy working, I go on holiday, I can't enjoy being on holiday. I constantly have headaches. I have become increasingly unhappy in recent years. I don't feel like doing anything."

"I have been having headache for five months. I was studying in England. After the attitudes of my racist lecturer, I started to get headaches. I found it so difficult to continue my education. I couldn't solve the problem there so I had to leave the school and came back. My father took me to several physicians. The medications they prescribed didn't work. My head is constantly aching and becoming numb."

The common feature of these patients is the spasm in the muscles of head and neck region. Stress seems to be the causing factor, but stress is related to life. These patients' perfectionist and over-responsible characters cannot be changed, but treating muscle spasms will greatly improve their life quality.

Muscle spasms cannot be treated with muscle relaxants, they can only provide temporary solutions. As always, interference fields should be corrected. Teeth clenching in particular is very common in these patients. Throat region and dental-jaw complex are the most obvious interference fields. In women, gynecological interventions also have a negative effect.

## The Relation of Cervicogenic (caused by the neck) with migraine and the Treatment

Headache is pain originating from all the structures like skull, vessels in nape and neck region, muscles, bones, ligaments, sinuses, the membrane that surrounds the brain. Headache is generally thought to originate from brain. However, brain does not have a sense of pain. In general, most headaches involve nape and neck area as well. Pain can start from nape and spread to the back or front part of the head. Patients think the source of the pain is temple. In some patients pain can start in the temple and eyes. Stiffness in the nape and pain develop afterwards.

Patients can show a point in their nape and back, telling that their pain starts from that region. Because of patients' insistence on their origin of pain being their neck, neck X-ray is taken. As a result of the X-ray, neck flattening, several hernias in the neck, arthrotic changes are detected.

"First, the point in my nape becomes so stiff just like a stone and then pain goes up to my head and spreads to the front and my eye and intensifies with throbbing sensation in my temple. Isn't it possible to remove whatever it is that causes the pain?"

"My neck is always stiff and aches. I have a neck hernia which causes the pain. The pain comes from the neck to my head."

In these patients, injections —even the ones used in neural therapy-applied on naple and upper back area cannot provide a long term solution. The main interference field should be corrected. The interference field of throat region and dental-jaw complex cause these problems. These causes should be taken into account in treatment.

However, 'vertebral artery dissection' is a rare occurence among headaches coming from the neck, it is a vital condition. There are two veins coming from the nape of the neck to the brain. The layers inside one of the veins called vertebral artery is dissected and the dissection manifests itself with a severe tearing pain in the temple. It causes stroke. Even if the patient had a migraine and headache history, the

sensation of this pain is so much different from all other pain experience. Emergency treatment is a must in these patients.

"My 42 year old male patient called an ambulance because of a sudden, severe pain in his nape of the neck. In Emergency Service, he was given pain relief injection and sent back home. Even though the patient had a history of tension type headaches, he sensed a different feature of pain and called the ambulance again the next morning. When I saw him in Emergency Service, he defined his headache and the start of his pain coming from his neck precisely. He was feeling dizzy and unbalanced. His definition of pain was suggestive of vertebral artery dissection in the first place. He was hospitalized and given some blood diluent because of dissection detected in the assesment. The patient prevented permanent stroke and even saved his life by applying to the hospital the next day."

### A story of Migraine Beginning with Dizziness

#### Before the Treatment:

- I feel dizzy and I have tinnutis. I had it once when I was doing my military service but it went away. When I was thirty, my right ear felt clogged again. I was feeling it the most while talking on the phone. I saw an ENT specialist. I had some tests done and was told that I was normal. When I was thirty four-thirty five, I had a vertigo attack which lasted for three to five hours. I felt dizzy, sick and had cold sweats. The only diagnosis the doctors made was my neck flattening. My attacks repeated four or five times a year. The medications given to me in the dizziness clinic didn't help either. I started to have tinnitus in my right ear five weeks ago. My tinnutis didn't go away in a few hours like vertigo, it was there all the time. The doctors couldn't find any problem in my ear.

### -Do you get headaches?

-Since my young ages, I have been having headache similar to migraine in my right temple but it does not occur as frequent as my vertigo. The frequency of my headaches has also increased recently.

### -Do you get headaches after your vertigo attacks?

-Yes. In fact, I started to have attacks of vertigo combined with headache.

-You are not suffering from vertigo. You are only going through attacks which are called typical vertiginous migraine. That's why your vertigo disappears within hours. You consulted ENT specialists in all those years, but in fact you have migraine. We must have your right upper wisdom tooth removed and do provide some treatment to have your jaw balanced. You are probably clenching your teeth.

-How did you know? I still have my wisdom teeth and I clench my tooth a lot.

#### After the Treatment:

"It was surprising that my dizziness and migraine were actually the same disease. I was so relieved after beginning the treatment. My dizziness was improved. I hardly got headaches. We started my dental treatments in this period. The inflammation in the bottom of my tooth was cleaned and my wisdom tooth was extracted. I didn't have any medical problems. I needed to have more dental treatments but

because I was feeling relieved, I stopped the treatment. One year later, I felt dizzy and had headaches again. My wisdom tooth in the other side prevented the movement of my jaw. I was told that I had to complete my dental treatment and have my jaw balanced, otherwise my medical problems could recur. This time I didn't discontinue the treatment."

# What are the Characteristics of Vestibular Migraine (Migraine with Dizziness)? How is it treated?

Mostly migraineurs suffer from feeling of dizziness during migraine attacks. Particularly in migraine attacks with aura, disturbances such as imbalance, clumsiness and running into things can be experienced. However, vertigo can be the main determinant of migraine in a rare group of patients. First the environment around you spins, the floor moves or sways under your feet and headache starts. If headache is not their, primary symptom, their symptoms are considered as 'perferential vertigo'. The problem is associated with the disturbance of the function of the inner ear which is the responsible organ for balance and the treatment is carried out accordingly. In general, the treatment is carried out by assessing the disease in two categories so the patient is followed up by an ENT specialist for vertigo and a neurologist for headache.

Typical vestibular migraine starts with dizziness. When headache intensifies, vertigo diminishes or disappears. Mostly, the interference field is wisdom teeth. As age progresses, attacks occur with the effects of joint problems and bruxism.

"Tinnutus starts in my right ear and gets worse and worse and dizziness starts. And I start to have a severe headache with throbbing sensation. When my headache gets severe, my dizziness and tinnutis diminishes. I take my medication and go to sleep. The next day I feel a bit tired and dizzy but still can manage to go to work. My attacks started in the second year of university. I used to have them 3-5 times a year. I started to work this year. I have a very stressful job. I am not satisfied with my work environment at all. I have started to have 1-2 attacks a month."

Headache along with dizziness suggests vestibular migraine but vestibular migraine attacks may happen without headache. Basilar migraine attacks seen mostly in adolescent girls are also evaluated in this group. Along with dizziness, double vision, severe imbalance and speech impairment can be seen.

Eleven year old daughter of my patient with chronic migraine who is a pyschologist had dizzy spells and fainted at school. Doctors couldn't find the cause and sent her back home. She was still feeling ill. There was no problem detected in her neurological examination. I thought she was having a kind of migraine attack due to her wisdom teeth trying to come in. In the dental x-ray it could be seen that her wisdom teeth was very big, inside the jaw bone and in horizontal position.

In the following period, she had two or more similar attacks with two or three months intervals. My patient was advised to take her daughter to a counsellor. She didn't have any psychological problems. She didn't experience any attacks apart from the year when she was growing so fast. When she was 16, her wisdom tooth was removed due to the damage it caused on other teeth. She doesn't experience dizziness or even mild headache. She started university in the U.S.

## How is migraine pain differentiated from sinusitis? What should be considered in the treatment?

Sinuses are the hollow cavities around the nose and in the skull area. Inside the sinuses are covered with damp skin like inner nose. Sinus inflammation is called sinusitis. When we have cold, we have acute sinusitis and, nostris are swollen, become congested and runny. We feel pain or heaviness in our foreheads and in the root of our noses. This condition is temporary. Chronic sinusitis is an inflammatory condition in these cavities without having a cold. This can also cause headache but the pain is obtuse which is —not like migraine pain—more like sensation of heaviness and feeling of congestion. Severe headache can rarely occur due to sinusitis.

"My dad suffered from headaches but his headache was because of sinusitis."

When migraine pain is not one sided and is in one side of the head at the temple or tension headache is mostly located in forehead, the possibility of the pain being sinusitis pain can be considered.

There are so many patients with ongoing chronic headaches for years, thinking they have sinusitis. You can find some people around you finishing packages of antibiotics several times and not getting rid of their headaches. Should these people have deviation in their nasal bone, the circulation of the air is disturbed and there can be mucus accumulation and swelling in the sinuses. An ENT specialist detects this condition so the patient attributes his symptoms to this cause.

"In my youth I had headaches as I used to go out with wet hair and had sinusitis."

It is true that sinusitis causes headaches but not as much as migraine. As sinuses connect to the outside air, they can be infected easily. They can create interference fields which can trigger migraine. My experience shows that sinuses are not the primary interference field in migraine. Headache and sinusitis pain differ from each other.

Sinusitis disappears on its own in the following years especially in patients with sinusitis story from high school years. In adolescence,

wisdom teeth can try to come in so neighboring sinuses become vulnerable to infection. At the same time, wisdom teeth trigger headaches. Therefore, the combination of sinusitis and headache is commonly seen.

"In my high school years, I used to get headaches very often due to sinusitis."

When I saw my nephew and niece on holiday, my niece in high school told me that she had persistent headaches. She sometimes felt dizzy as well. I said to her, "Your wisdom teeth are trying to come in which sometimes causes headaches in these ages. You are having migraine type headaches. Wisdom teeth are also the cause of your dizziness. What can be expected from our family? We don't have anyone in our family who doesn't suffer from headaches anyway." My nephew in university who is older said, "I don't have migraine. I had migraine in high school years and it was because of sinusitis. I don't have sinusitis and headache anymore." "Your father once told me the same thing. He attributed his headache to his sinusitis. The cause of your headache and sinusitis in high school years was your wisdom teeth. Because your wisdom teeth have come in, they don't cause any problems now", I said to him. It was time to treat both my nephew's and niece's wisdom teeth.

### A story of Status Migrainosus

#### Before the Treatment:

"I am 18 and I have been having headaches for 2 years. My headache sometimes starting from my left side or right side causes a severe throbbing sensation in my temple and eye. After the second day, the pain moves to the other side and stays there for two days. And then it goes back to its first place. So I have headache for at least seven days. I feel like I'm going crazy. I cannot even go to the school. I take pain killers which don't work. They take me to hospital and I am given an IV drip with some medication which makes me sleep. I wake up in a few hours and I still have headaches. This episode of pain occurs 3-4 times a year."

#### After the Treatment:

"No medication helped my headaches. The reason behind it was my wisdom teeth. According to my doctor, if the cause of migraine is wisdom teeth, headache medications don't work. She asked me at which side of my head I suffered headache more often. I suffered headaches at my left side more frequently so I had my left upper wisdom tooth removed first and then the right one. Since I was very busy with my lessons, I was told to have the lower wisdom teeth removed later as they were inside the gum like my upper teeth and damaging the neighbouring teeth. My pain was completely gone. After the university exam, I will have my lower teeth extracted."

## What are the Characteristics of Status Migrainosus? How should the treatment be?

The term status migrainosus is used to express the consecutive occurrence of attacks. To call it status migrainosus, the attack should last more than three days and the attacks should recur without any intervals.

We have mentioned before that the autonomic nervous system is temporarily affected during a migraine attack. The organism has a working system defined as acute period which involves 72 hour period. Whatever affects the system, it tries to stabilize itself within this period of time. That's why migraine attacks last up to three days. It is exceeded in status migrainosus.

Chronic migraine and status migrainosus shouldn't be confused with each other. In chronic migraine, headache lasts for days. Pain continues for more than three days, but it is not only one attack as in status migrainosus. While chronic migraine is more commonly seen in middle ages, it is more likely for status migrainosus to develop in children and young migraineurs.

The treatment of status migrainosus is similar to other types of migraine. No matter whether it is status migrainosus or daily headaches combined with migraine attacks, once the cause of the disease is detected and the treatment is carried out accordingly, a good outcome will be obtained. However, drawing this distinction is essential while listening to the patient's headache characteristics. Patients tend to tell their chronic headaches like status migrainosus (saying they have persistent headaches everyday). If it is chronic migraine, mostly the treatment involves dental-jaw complex and requires mouth splint. In status migrainosus, the treatment mentioned is not required.

## **A Weekend Migraine Story**

#### Before the Treatment:

"I have been suffering from headaches for long years and I am so fed up. I don't get headaches at work like other people. I have headaches while I am not working. I can have headaches at the weekends or when I am happy. As I work as a manager, I am very busy and stressful at work. I wish I could rest and sleep for long hours at the weekends. But, just to avoid having headache, I put the alarm on and wake up early as if I should go to work. Even if I go to bed late, I should wake up at the same time. If I sleep for one more hour, I wake up with headache and will have a terrible day. I can't make plans for the weekends. Migraine is waiting to sneak back in my delightful moments."

#### After the Treatment:

"I had neural therapy and had dental treatment for a problem in my tooth. My migraine disappeared. I can enjoy my weekends. I wake up late on Sunday mornings and can have late breakfast outside with friends. I don't have to worry about how I will wake up early if I go to bed late and whether I may have headache if I sleep more. I don't have problems like that anymore. I am not afraid of being happy."

## How to Cope with Migraines Occurring at the Weekends or in Happy Moments?

Migraine attacks are often associated with stress but migraine can catch the sufferer in happy moments too. Some patients complain, "Whenever I feel happy, I get an uplifting news which cheers me up or get excited, I immediately get migraine attack.I had a patient who had been suffering from migraine for long years. After I treated her migraine, she told me about the wedding of her daughter who was so sweet, hearty and as beautiful as a princess.

"My daughter has a dreamlike marriage. They wanted to have their wedding in the Greek Island Santorini. They organized a special wedding and only invited close friends and family friends. We got prepaired for it with full of joy and went to the island. As I got off the plane, my migraine started. Even my wedding didn't feel so beautiful and special to me. But I neither could enjoy it nor can even remember it completely. To ease the pain, I took so much medication at the wedding but I couldn't really enjoy it. As soon as the wedding finished, I fainted as a result of the medication overdose. I wish I had met you before...If only I had known you before, I wouldn't have to go through such an experience. I feel so relieved now, I am not worried about going on holidays anymore. In the past, my headache would start on Saturday and last until Monday afternoon at least three times a month. I don't get these headaches anymore."

My patient couldn't enjoy her daughter's wedding but she didn't get any headaches when she became a grandmother. She is a great grandmother and spends joyous time with her grandchild.

Migraine can also ruin very special moments. Since positive changes in life affect the system as much as negative changes, migraine can hinder your rest. Autonomic nervous system can go out of control causing nerve storms as the expression of Liveing. The treatment of these patients do not differ from the treatment of patients having usual migraine attacks.

In the treatment, interference fields are detected and controlled through similar method. As stress is not the starting factor of a migraine attack, happy moments or resting do not initiate it, either.

# **Are Headaches Caused by Sexual Activity Dangerous?**

Despite not being very common, some patients complain about headache which is brought on by sexual activity. Pain comes on suddenly at the time you reach an orgasm or just before an orgasm. These patients complain about a sudden pain mostly coming from the nape and disappearing within a few hours. Some sufferers experience it so frequently that they may refrain from sexual activity.

While sexual activity initiates headache in some migraineurs, some sufferers say sexual activity relieves the pain of migraine if they have intercourse at the point they sense a headache is coming.

'Pre-orgasmic headache' is a dull pain especially located in nape and jaw muscles. When the stories of these patients are questioned in detail, it is understood that they suffer from spasm in their head-neck muscles like tension headache. Good results will be obtained by the treatment of interference fields in neck and head area.

'Orgasmic headache' is very severe and explosive in character. It is very important to pay attention to a very important point in headaches appearing for the first time during sexual activity. There can be a ballooning in the arteries of the brain and damage of the vascular structure which is called aneursyms. As the pressure in the brain increases, the damaged vessels are torn and bleed. The condition is so dangerous that it can be life-threatening. The pain is so excruciating that the patient feels like a bomb exploded in his head. In some patients who are lucky bleeding can temporarily stop but it is misleading. Bleeding restarts in a short amount of time and patient can lose his life. Immediate medical intervention should be provided to these patients and the region should be treated. Subarachnoid hemorrhage (SAH) should be considered in very severe headaches which occur during challenging physical activities.

# **Are Migraine and Epilepsy Linked?**

Migraine and epilepsy have common features. Epileptic seizures involve loss of consciousness and mostly fainting. As well as actual fainting and contraction of muscles, different sensory and neurological symptoms can occur before loss of consciousness.

There is usually loss of consciousness in epilepsy, but it is rarely seen in a migraine attack. Although it is generally considered that severity of pain causes fainting, fainting can also be associated with autonomic nervous system not functioning properly. In childhood migraine it is a commonly seen condition that children who faint during infancy can develop migraine in later years of childhood. Ongoing migraine attacks which involve fainting since the its first occurence are rarely seen.

"I am 38 years old and I have been having fainting spells since my childhood. I pass out all of a sudden without realizing and when I become aware, I find myself lying on a floor. My family told me that my face became all white for a short period of time. In my childhood, I fainted once every once or two months. I rested for a bit and returned back to play. I started to have headaches when I was in primary school. In the following years, my headache became so severe with a throbbing character and went on 3-4 hours. I was told that I had migraine. I kept having headaches along with fainting 2-3 times a year. I even fainted while doing my military service. Light and sound disturb me and I sometimes feel sick. I can say I am used to my condition but the idea of fainting somewhere I don't know sometimes freaks me out. I don't know when it will happen."

For nearly 2000 years, the term 'aura' has been used to define sensory hallucinations preceding epileptic seizures. In the last century, it has been used to define the changes in migraine. Neurological problems such as visual loss, drowsiness, weakness and speech difficulty appear especially in migraine with aura due to adverse effects of changes in blood flow in the brain. However in Jacksonian epilepsy, spasms starting from the hand spread to the forearm, upper arm and leg. Spasms moving to the other side of the body can lead to

deterioration in consciousness. Apart from this, short term symptomps such as numbness, tingling, burning and rarely pain can occur in hands and fingers.

Patients having migraine with aura experience numbness and weakness which spread from hands to arms. In Jacksonian epilepsy, epileptic seizures start in a similar way. As epilepsy originates in the brain, it spreads from the hand to the face according to the order of motor centres in the brain. A migraine attack with aura does not follow the exact order, which is the distinguishing feature between an epileptic seizure. In addition, epileptic seizures last for short time, start and finish within minutes. Migraine with aura lasts for 15-20 minutes or longer.

Migraine with aura and epilepsy share many clinical features. Epilepsy is a disorder in which signs from the problematic areas of the brain (bio-electrical irregularities) temporarily upset brain functions. This is a kind of brain storm. And migraine is a disorder in which autonomic nervous system is temporarily upset due to bio-electrical problematic fields in the body. External factors such as hunger, lack of sleep, stress and overexposure to sensory stimuli can be triggering factors for both of them.

The common feature of both disorders is the genetical sensivity of the nervous system. This sensitivity causes storms in the central nervous system in epilepsy and in the autonomic nervous system in migraine.

We have already mentioned that having this kind of sensitivity is a privilege. Many scientists, thinkers and artists have either migraine or epilepsy and sometimes both. The difference feature in their nervous system affected their productions.

The father of pyschological novel Dostoyevsky mentioned that his epileptic seizures had positive effects on the quality of his creativity. He defined the epileptic seizure as incredible enthusiasm and the moments when time stood still.

### **Famous People with Migraine:**

#### Scientists and Thinkers:

Charles Darwin, Friedrich Wilhelm Nietzsche, Sigmund Freud, Hildegard von Bingen...

#### Leaders:

Napoleon, Julius Caesar, Thomas Jefferson...

#### Artists:

Vincent van Gogh (he had both epilepsy and Meniere's disease), Pablo Picasso, George Seurat, Claude Monet, Lewis Carroll, Cervantes, Virginia Woolf, Stephen King, Elvis Presley, Elizabeth Taylor, James Cromwell, Whoopi Goldberg, Janet Jackson...

#### Famous People with Epilepsy:

Socrates, Herakles, Aristo, Julius Caesar, Michelangelo, Leonardo da Vinci, Alfred Nobel, Jean-Jacques Rousseau, Blaise Pascal, Newton, Stephen Hawking, Lenin, Molière, Lord Byron, Dante, Dostoyevski, Agatha Christie, Edgar Allan Poe, Charles Dickens, Niccolo Paganini...

It is certain that some of these famous people have migraine or epilepsy and some of them are thought to have it. And in some sources, some of the names are said to have both migraine and epilepsy. What is important for me is that both of these diseases are caused by the difference feature of the nervous system. In my opinion, this difference contributed to these famous people in becoming a pioneer in their fields. We may not be as successful like them but recognizing our difference as a migraineur makes an important contribution to our life.

# A Story of a Severe Migraine Hindering the Ability to Leave the House

#### Before the Treatment:

"I have headaches, dizziness, but most importantly I suffer from dual incontinence. I had a serious accident 4 years ago. My forehead, eyebrow and the left side of my face were completely cut open. The bone around my eye socket and my cheekbone were broken. I started to have headaches in the wound area two years later. I have stabbing pain followed by throbbing pain in my eye, temple and forehead. I feel so sick but I cannot throw up. I find it both physically and emotionally difficult to deal with dizziness along with the pain but most importantly my dual incontinence problem.

Before the pain I experience severe dizziness. Sometimes it occurs without pain, but my biggest problem is not being able to control my bowel movements and my bladder. I have the urge to urinate and defecate after pain or suddenly without feeling any pain beforehand. I can't hold in urine or stool. I go somewhere only if I have to and only if it is short distance by car. I plan toilet stops in my trip. My problem of dizziness and urge to use a bathroom can start any time and if I am out, I cannot control it. Because of this, I cannot work, my social life ended and I am always at home.

Along with all these problems I sweat excessively as well. I experience all of these problems at least 4-5 times a week. These symptoms can start with no reason. If I am at home and use my own bathroom, I can handle the situation much more easily."

#### After the Treatment:

"According to my doctor, all the things I experienced were associated with the accident and could be considered as migraine. I always knew migraine as headache so I never thought my dual incontinence and dizziness problem which made my life so miserable could be defined as migraine. I was told that I was a different case so it was unclear how long my recovery period would take. However, I became so hopeful to hear that I would be treated.

I started to recover so quickly with neural therapy applied on my facial scar. After the third session, my dizziness problem and faecal

problem disappeared. I could go out, go to the clinic to have my treatment and control my bladder and bowel movements. In the following sessions, I only suffered from headaches which diminished in both severity and frequency. After the 5. session, my wisdom tooth was extracted and I got rid of headaches. Now, I have returned back to my normal life. I can go out and I am thinking of working again."

# Atypical migraine, migraine with autonomic dysfunction and the treatment

During migraine attacks which we define as autonomic dysfunction (work disruption), control of vessels as well as control of bowels can be affected. This condition manifests itself as headache caused by enlargement of the veins and nausea-vomiting caused by slowing bowel movements. Diarrhea can also occur in some patients. These symptoms can be experienced in different levels but the most different and severe symptom is mentioned above. The autonomic control of bowel and bladder was so impaired that it hindered the patient to go out of the house and his ability to maintain his acitivities outside the house. Feeling distressed and the urge to go to the toilet with excessive sweating is followed by headache in the left side. These symptomps are sometimes accompanied by dizziness.

The patient's medical problems started after the accident. The pain was located in the area involving the scar, left forehead, left eye and the temple. It was thought that the area exposed to the accident trauma was the interference field. With neural therapy applied on the scar, negative stimuli from that area began to be corrected. The autonomic dysfunction of the body (not being able to hold in urine and stool) began to improve in a short amount of time. The patient's migraine attack diminished. His left upper wisdom tooth was considered to have a negative effect on his migraine so it was removed. And his migraine was under control.

The medical story of this patient clearly shows

- migraine is dysfunction of the autonomic nervous system
- migraine is caused by an interference field of the body
- the importance of life chart
- the fact that interference field may not only be one area in the body but can change during the treatment
- the importance of healing effect of neural therapy on interference field
- that all types of migraine can be treated
- contrary to what is accepted today, migraine is not a brain disease but it is a disease of the body.

# **Fourth Chapter:**

# The Treatment of Headaches Caused by Tooth-Jaw Complex

(Cluster Headache, Trigeminal Neuralgia and Others)

# How have the cause of cluster headaches and trigeminal neuralgia been resolved?

My past has always guided me in reaching the source of pain and producing solutions. While looking at my father's extracted teeth in the jar in my childood, I knew exactly that one day I would find solution for the similar kinds of pain my father suffered from. A memory still with me from those days is people asking my father why he kept having his teeth pulled out. They were wondering what he was going to do without them. I remember his words, "I will have all of them pulled out just to get rid of this pain." My father's experience made a great contribution to me in solving headache problems discussed in this section.

What I learned in the third year of my medical education also guided me in this process. In propaedeutics course (the first encounter with the patient) my lecturer asked me to get the patient's story and criticized me for asking questions to the patients inexpertedly. He told me the right way to do it. I was so embarrassed that day, but this lesson I learned provided me to listen to patients effectively and solve the causes of the pain.

As I have mentioned before, 'Pain is the sensation produced by something contrary to the body. If there is pain, there is surely a problem somewhere in the system'. Although the majority of the patients sense that the cause of the pain is their teeth, this fact is not taken into consideration in treatment. What causes this?

As my lecturer said:

"While talking about their medical problems, patients always talk about the diagnosis of their illness without even realizing, as long as the doctor knows how to listen."

Most of the patients in this group consult a dentist telling their pain is related with their tooth. 60 percent of the patients with cluster headache see a dentist first. While some of the rest link their pain with their tooth after being told, some do not have any impression about it.

The condition in trigeminal neuralgia is more ironic since half of the patients pain occurs during or immediately after dental treatment. Mostly their pain starts with their last dental treatment. The other half consult a dentist thinking that the pain occured at any time is caused by their tooth. Only about 1 percent of these patients directly consult a neurologist for neuralgia. These patients are referred to a neurologist after their dental treatment has been completed or mostly after having been told that they do not have any problem in their teeth —in fact, they have a dental problem.

I began to work with a radical decision on the direction that some headaches originate only from dental-jaw complex. The results I obtained from many patients have confirmed my thesis.

Why hasn't this condition been detected so far?

Because firstly, listening to the patient in pain and as Tissot mentioned, while listening considering he might be in pain because of another area in his body and secondly raising awareness of the dentist about examining the patient with sensitivity spesific to these patients in order to detect the problems in teeth are required.

Specializing in dentistry is like a difficult craft, so deviations from the ideal treatment is inevitable. These deviations which do not cause any problems in general can lead to serious problems in the patient group suffering from migraine and headaches. Even the small deficiencies in the treatment can create negative stimuli which can trigger headache and upset the system. The dentist should be aware that this group of patients have a special sensitivity in perceiving the negative stimulus. Because in these patient group, even a minimum deficiency in a canal treatment or a decay under a filling which is not very noticeable can cause severe pain.

Cluster headache and trigeminal neuralgia are typical examples of these kind of pains. In addition, there is a type of headache classified as primary headache in IHS (International Headache Society) which develops due to dental-jaw complex. Although, primary headaches are classified as unexplained headaches, I was able to determine the cause of the majority of them with Gökmen Approach.

In this chapter, headaches in the classification of IHS are classified differently with an approach which involves causes related with dental-jaw complex. Trigeminal neuralgia which is classified as secondary headaches (the underlying medical condition is known) in IHS classification is also included in headache group related with dental-jaw complex.

### Headaches caused by the problems in dental-jaw complex:

#### Cluster Headache

Migrainous cluster headaches (headaches which are similar to migraine in duration and severity but also similar to cluster headaches in terms of location of the pain and the accompanying symptoms. The recurrence of migrainous cluster headaches is unpredictable so this kind of headaches have similarities and differences with both migraine and cluster headaches.)

Some migraine types (migraine in adolescent and the majority of migraines involving the same eye in each attack)

## Trigeminal neuralgia

Cluster headaches with trigeminal neuralgia (cluster headache sometimes accompanied with symptoms like neuralgia momentary sharp jabs of electric or lightning like pain)

Trigeminal neuralgia with the characteristics of cluster headache (the symptoms of cluster headache recurring in trigeminal nerve area in short durations and frequently just like neuralgia)

Atypical conditions with glaucoma (high eye pressure in one eye) or papilledema (edema in the optic nerve)

Headaches associated with temporomandibular joint, namely jaw joint (headaches with the characteristics of migraine and tension headaches. The treatment is followed up according to this diagnosis but in fact these headaches are caused by teeth clenching and temporomandibular joint joint problem.)

Primary stabbing headache (stabbing pain in one side of the face)

Hypnic headache (or 'alarm clock' headaches which occur at night and awakens the elderly)

In almost all headaches, dental-jaw complex has an important role but all the headaches classified above are only caused by dental-jaw complex.

#### Some common features of these pains are remarkable:

Problems in dental-jaw complex are the main cause of the pain. The pain is treatment resistant as long as the problems in this area are not solved.

Generally all the pain killers and migraine medicines commonly used are ineffective. In solving a headache, acupuncture and neural therapy are much more effective compared to medicines. But in these kind of headaches, they can be ineffective or can have a temporary effect.

Compared to other types of migraine and headache, they are more severe and excruciating.

More than half of the patients are aware of the connection between their pain and their teeth.

If the patients' problems continue even after the treatment of dentaljaw complex, the treatment plan should be reviewed and the need for additional treatment (the need to use a mouth splint, and to replace an old filling -which looks good- with a new one) should be evaluated.

It should be kept in mind that headache problems of these patients can only be solved when their dental treatment is completed properly.

# A Story of Typical Cluster Headache

#### Before the Treatment:

"My headaches started in the spring of the year I started the university. My headaches start from my left eye and spreads to my temple. I have unbearable pain which feels like knife stabbing. My eye hurts like it is going to pop out and becomes red and watery. My left nostril gets congested. When the pain begins, it gets so severe within minutes that I feel like I'm going crazy. It lasts for half an hour and quickly goes away. When the pain is about to improve, I have a runny nose. I feel sick during my attacks. After my attack goes away, I feel relieved until the next morning. It starts at about 10.00 a.m. every morning. If I am at school, I leave the class. The first time happened, I went to a hospital and I was told that it was migraine. It lasted about 20 days and went away. It lasted a month in spring last year. It recurred five days ago. A doctor told me, 'Your nostrils are swollen, it can be allergic.' When another doctor diagnosed me with migraine and prescribed me antidepressants, I did a research on the internet. All my symptoms fit cluster headache completely."

### How was the patient's treatment done?

In his story, the patient defined a typical young person's cluster headache related with his wisdom tooth. He didn't have migraine or cluster headache in his family story. He sweated excessively and felt so distressed during attacks which he —only told when being askeddidn't mention himself. His wisdom tooth which was typical for his age was extracted. He didn't experience any attacks in the following days or years.

#### What is Cluster Headache?

Cluster headache is known as young male disease starting at the age of mostly around 20. It comes in attacks in the certain period of the year, usually during seasonal transitions and lasts 15-45 days and sometimes even three months. In this period, attacks which last 20-30 minutes occur nearly every day. After the attacks end, there is a pain free remission—silent- period lasting for months.

The detailed description of cluster headache was made by Bayard T. Horton. For this reason, it was named 'Horton headache' after him. So many different names such as trigeminal autonomic cephalalgia (autonomic headache of the trigeminal nerve), migrainous neuralgia and histaminic cephalia were given to it but considering the periodic course of the pain, the term cluster headache was coined in 1952 and it has been widely accepted since then.

The most decisive feature of cluster headache is the severity of pain. It is said to be the most excruciating pain a human can endure. The pain which is so hard to explain is described as "it is like torture, it feels like somebody is stabbing me in my temple and pulling my eye out of its socket or puting a poker in my eye. I feel a burning sensation in my eye like chilli pepper burn or boiling hot water is poured over it. The pain is so brutally destructive and devastating." The severity of the pain is so intense that the patient can hit his head on the walls, go crazy and even take his own life. In some severe cases there have been patients who suffered so badly from the pain that they have attempted suicide. Some have attempted to throw themselves from windows and injure themselves with guns and knives. Patients had to be constrained and the implements removed from their hands. For this reason cluster headaches are called 'suicide headaches'.

A cluster headache becomes extremely severe, its severity diminishes and ends very quickly. The pain is one sided, intense around the eye and in the temple. It is very rare for the pain to switch sides with the next onset of attacks. The pain can radiate to a point from behind the head, the point where the scalp meets the forehead, cheek or chin and can even effect the teeth, throat and back.

No matter how far the pain radiates, the intensity of pain is located around the temple and the eye. Following the attack, there may be edema and soreness in the pain side. Some of the patients describe this condition as "Cluster headaches have the tendency to be rather unpredictable and can emerge at any moment These cluster headaches are sneaky, they are waiting to restart at any time".

"I don't have any medical problems except for the periods of pain. Even though the pain comes and goes within an hour, I always have the feeling in my eye that it will recur. The area around my right eye becomes so swollen during the pain that I cannot open my eye. The pain diminishes but stays on the affected side of the face in the hours between attacks. Even after the attack the pain in the area hurts so much as if it has been hit."

Autonomic syptoms developing in the pain side are important for diagnosis. These symptoms involve tearing and redness of the eye, swelling around the eye, drooping eyelid and pupil becoming smaller on the affected side. Nostril on the affected side is blocked and mostly becomes runny towards the end of the attack or it sometimes can become runny even from the beginning. Being oversensitive, the affected side can feel so sore to the touch like an open wound or a bruise.

In medicine, these symptoms are called complete Horner's syndrome or partial Horner's syndrome. This syndrome is caused by the sympathetic nervous system which is a part of the autonomic nervous system, being negatively affected. While this condition can develop during an attack, it can improve after the attack and continue during the painful period. Mostly these patients can have mild edema in their eye and their eye in the pain side —even when they are not in pain- can become noticeably smaller.

"My nose is always blocked but it becomes completely blocked during an attack. When it becomes runny, I sense that the attack is about to end." Activities of digestion which are the important part of the autonomic nervous system are not much (much less compared to migraine) affected. Nausea-vomiting occurs in ¼ of the cases. These symptoms are generally mild in severity however they can be very severe in some of the patients. The urge to go the toilet or diarrhea may occur. Having a partial erection during an attack is rarely mentioned as well.

"I am 38 years old. For 15 years, I have been having attacks lasting three months every year. I suffer from diarrhea in each attack. My attacks start to improve towards the end of these periods. I go to the toilet three or four times a day. I am aware that this condition is related to cluster headache but I could never think all of these symptoms were related with my tooth. The day I renewed my root canal, I got rid of the attacks and diarrhea."

"I have the urge to go to the toilet but I can't do anything about it."

In all of the patients sweating —a function of the autonomic nervous system- excessively occurs. Cold sweating during a cluster attack is distressing and rarely occurs only in the affected side of the face. Sweating mostly starts from the chest and goes up in the body and sometimes affects the whole body. One may think that somebody has poured down water on the part of the patient's boddy which sweated excessively.

As a general indication that the autonomic nervous system is affected, hot flashes, feeling of discomfort, squeezing of the heart feeling, high blood pressure (seen especially in elderly male patients) are symptoms mostly accomponied by excessive sweating.

While sweating which is rarely seen in migraine is distinctive in cluster headache, light and sound sensitivity rarely occurs in cluster headache.

As cluster headache is caused by autonomic nervous system like migraine, they have many indications in common but behavioral patterns of patients during a migraine and a cluster attack differ. A migraineur avoids movements and stimulations as much as possible and wants to rest in a quiet, light-free environment. However, patients with cluster headache are highly restless and constantly move. Not being able to lie down or stay still, they may throw themselves out. They frequently moan a great deal, cry or even scream. During a cluster attack, the majority of patients sit and lean forward to the side of the pain, press their eyes in the pain side with their palms and writhe in pain. And they stand up, walk around, open a window and stick their heads out. Some of them press ice pads on their heads and some hold their heads under boiling hot water. The sight and sound of someone in a severe attack will be shocking and alarming to a person who encounters it for the first time.

"I wish I had migraine. I would take my medication, have my injection and go to sleep. I would wake up feeling no pain, maybe just some distress. During a cluster attack, I could neither lie down nor stand still. I am overwhelmed with distress, sweat excessively. I am going through unbearable experience, nothing works neither medication nor injection."

This patient has had migraine for 25 years and cluster headaches in the same side of his head for 3 years. Having experienced both migraine and cluster headache, he can tell the differences between them exactly. While he had severe nausea and became very sensitive to light and sound during a migraine attack, during a cluster headache, he had excessive sweating and felt restless and agitated. His nausea during a cluster headache attack was mild and he didn't experience light/sound sensitivity.

Pain of any illness affects every patient's life in a negative way but cluster hedaches affect even worse than all. There are patients who have been made redundant during a cluster headache period. Some patients whose attacks keep them awake have restless sleepless nights. They can look like walking zombies (in the words of a patient) during the day. In cluster headache periods, the attitudes of sufferers towards people around them can be offending and rude.

Cluster headache is nearly 10 times more common in males. It is accepted that it is more commonly seen in smokers and alcohol drinkers. However, cluster headache patients don't improve quitting smoking. The relationship of cluster headache with alcohol is more

interesting. Even a sip of alcohol taken in a cluster period can cause the pain to begin. It is very common for patients not to have alcohol during periods and drink as usual the rest of the time. Alcohol intake can rarely initiate the pain in silent period. Changes of weather, seasonal changes in particular trigger attacks. The relationship with particular kinds of food as in migrane has not been defined. Changes in the place the patient lives can initiate or stop an attack.

"I didn't have any attacks in Antep while doing my military service as there was no humidity in the city. After completing my military service, I returned back to Izmir and they recurred."

"My attacks start on the first dark and overcast day when the winter starts."

Cluster headache cycles are unique to each sufferer. While some cluster attacks show a regular pattern, some cluster cycles may show changes. Repetition, duration and severity of attacks can change over the years but they still follow a regular pattern. Cluster headache attacks usually occur 1-2 hours after going to sleep at nights. Attacks can also develop within first hours after waking up. In general, they happen once a day but the frequeny can go up to 8 attacks a day. The duration of attacks does not exceed 2-3 hours but there are some patients whose attacks last up to 12 hours.

The attacks of young male patients are generally episodic since the first time it occured. Sometimes after 1-2 attacks in the beginning, it can turn into episodic after some silent years. It can spread over one year during the period when wisdom teeth are coming in and can return to its annual pattern. Attacks can occur with two or three days intervals in the first week and then turn into daily headaches and the severity of attacks reduces and go away in the last week of the attack period.

"I would have attacks lasting up to two weeks when I was in high school. When I was twenty-one, I had one year break. And every spring for the last eight years I have been suffering from this pain which lasts one month." "It has always happened at the same time for years. I've noticed that like an alarm clock, this headache has been waking me up one and a half hour after I go to sleep. It doesn't matter what time I go to bed, the alarm clock works the same. Even I sleep during the day, pain wakes me up. It has been three weeks since the last time I had a deep sleep. I have started to feel anxious about sleep."

Misdiagnosis is so common in cluster headaches. Only 1/5 of my patients were correctly diagnosed from the beginning. In general, patients were told they had migraine. A few patients were also diagnosed with tension headache and trigeminal neuralgia. As well as patients diagnosed with allergy and eye problems, <sup>3</sup>/<sub>4</sub> of patients' conditions were associated with sinusitis. There were also patients having undergone sinusitis surgery. Almost half of my patients self-diagnosed their illness. Starting from this, I believe that the prevalence of this illness in society is 4-5 times more than it is thought.

Male patients hardly have a family history of migraine and cluster headache. They usually don't develop any other type of headache during their lifetime.

# **How and Why does Cluster Headache Occur?**

After the trigeminal vascular system is triggered, blood vessels widen during a cluster headache attack. Trigeminal nerve is the nerve providing sensation and some functions of half of the face. Negative stimulation of this nerve deteriorates the work of autonomic nervous system and excessive dilation of blood vessels causes severe pain. In the physical integrity of the autonomic nervous system, systemic symptoms such as sweating, elevation of blood pressure, palputation, nausea and diarrhea also occur during an attack.

Migraine and cluster headaches are like the different grades of the same disease. In both of them the underlying change is in the autonomic nervous system. The autonomic nervous system is more affected in cluster headache and the nerve storm defined by Liveing is more violent. Also, different from migraine, cluster headache begins with trigeminal nerve being triggered. For this reason, cluster headache is more similar to trigeminal neuralgia than migraine.

The region where trigeminal nerve is exposed to external factors is teeth. Negative stimulation from the tooth of the sufferer having sensitive teeth initiates trigemino-vascular change. For this reason, patient mentions his pain within the boundaries of trigeminal nerve (anterior scalp, eye, temple, chin). In few patients whose pain originates in lower jaw, glossopharyngeal nerve is also affected and causes pain in root of tongue and throat.

As the blood circulation in the affected area deteriorates, tissue oxygeneation deteoriates as well. Therefore, the pain is very severe and the patient has oxygen deprivation. Because of this reason, these patients open windows and throw themselves out. Inhaling pure oxygen can reduce or eliminate the pain of cluster headache. Oxygen should be given a high standart of 8-12 L/min to the patient consulting to emergency service during an attack.

In research it is observed that the hypothalamus in the brain is affected during attacks. Temporal characteristics of the attacks has been linked to this region. Since we know that the hypothalamus acts like the ganglion (central node, central station) of the autonomic

nervous system in the brain, it is affected in cluster headache as well as migraine.

In fact, most of the patients define how cluster headache occurs without realizing. There are so many sufferers who had their wisdom teeth extracted, pushed and tried to pull their teeth themselves or insisted that the dentist remove their healthy teeth and had them pulled out.

"I had my first headache when I was 21. I felt pain in my wisdom tooth and had it pulled out. My headache recurred when I was 25. It has been going on for so many years. Sometimes sticking a toothpick between my teeth and making my gum bleed helps ease the pain."

"I don't suffer from my toothache so much but the base area of my teeth is swollen and gets watery. I feel like I can feel better if I push and pull my teeth out."

"I have been suffering from this pain for years. I even convinced my dentist to pull out even my healthy teeth. But my pain hasn't gone away."

#### **How is Cluster Headache Treated?**

As attacks usually begin around 20 years of age, extraction of wisdom teeth can be sufficent for recovery. This is a simple solution. Similar solutions can be provided in about half of the patients with cluster headache. Most of the patients who consulted me were chronic cluster headache sufferers – they had been suffering from pain for so long and had other dental problems in addition to their wisdom teethand that's why I could provide simple solutions only in 1/3 of them.

As well as being easy, it can sometimes be challenging to remove interference fields but the stages of the treatment do not change. Firstly, the area causing the pain is detected. Then all the teeth are seperated into four quadrants—like dividing the clock—and the specialist works on one quadrant. On rare occassions, a patient can have bilateral cluster headache and his quadrants can change during the treatment. After the quadrant is determined, there are 7 teeth or 8 teeth including the wisdom teeth to be treated.

The treatment of these teeth involves three stages.

- 1. Cleansing the focus of dental infection
- 2.Required tooth extraction
- 3. Equal balance and load distribution

# Cleansing the focus of dental infection

First, the decays are cleansed and filled. Meanwhile, deficiencies in the previous canal treatments if there are any are corrected. If needed, problems with the gums are treated.

If the patient finds that their pain recurs after a few pain free days then the treatment that was previously used should be followed.

Old fillings in good condition or well-made canal treatments cannot be changed in the beginning. Should the attacks continue like before, the specialist can move on the second stage. The specialist can also decide to renew the previous treatments such as fillings and canal treatments which he didn't think it was necessary in the first stage. Making these decisions is very difficult but if the changes in pain are listened well, the pain will be guiding.

### Let's try to understand it with some examples of patients' stories.

My 28 year old male patient suffered from typical cluster headache for 7 years. He consulted me during an attack period. He didn't have any missing teeth. He had one filling in the right upper quadrant done a month ago and I associated this tooth with his cluster headache. He also had a wisdom tooth causing cluster headache for 7 years. Firstly, his good-looking filling was opened and found to be problematic. His pain immediately improved following the treatment. The patient consulted me with pain two weeks later and his wisdom tooth which initiated his attack 7 years ago was extracted.

The 26 year old sufferer from a different city called me. The tiny decay in her molar tooth was filled and her wisdom tooth was extracted in the small city she was living. Her pain diminished for a few days but afterwards she started to have 7-8 attacks per day. As a result, she had to come to Istanbul. She didn't have any unnoticed tooth decays. When the filling which seemed to be well-done was opened, it was found that there had been a tiny decay left underneath the tooth and it was cleaned. On the same day, her cluster headache attacks went away completely.

The 34 year old patient had cluster headache for so many years. He came to my clinic from another city. He had a deep filling done on his molar tooth. Following the treatment, he didn't experience any headache for 3 days. Then his attacks recurred but this time they were milder. Because the dentist performing the filling treatment told the patient the nerve should be removed if the pain continued, the patient took an appointment from the dentist for root canal treatment. Considering the course and the story of the patient's headaches, it was decided that he didn't need the root canal treatment and he could hardly be persuaded not to have it. Mouth splint given to the patient reduced the load on his tooth with deep filling and his pain went away.

My patient who had cluster headache for 15 years got his previous root canal treatment redone and got another root canal treatment done on his different tooth. There was no change in his headaches. He also had severe gum disease. His pain went away after the gingival curettage in the corresponding quadrant.

There can sometimes be no remarkable findings in the teeth. The 37 year old patient whose spouse is a dentist like him had attacks for 10 years. His root canal treatment in the corresponding quadrant which seemed to be in good condition was redone. The next day, he called me telling he felt so much better. In the second stage of the treatment, his wisdom tooth which wasn't causing any problem according to the couple was extracted and his attacks ended.

#### Required tooth extraction

Wisdom tooth in the corresponding quadrant should be extracted in cluster headache cases. Wisdom teeth generally have curved roots and unhealthy structures. Even a small piece left in the extraction area can cause the pain to continue. The patient should be very careful during the recovery period. Problems in recovery period (food particles stuck in the extraction area) can cause attacks to recur.

My patient who had been having attacks for 15 years got rid of her attacks after getting dental fillings and having her wisdom tooth removed. Four days after her wisdom tooth removal surgery, she told me that she started to have attacks and the frequency of her attacks increased to twice a day. As I guessed, she wasn't attentive enough after the surgery and particles of nuts were stuck in the extraction area. The area was cleaned but because of this reason, her recovery took longer than expected.

# Equal balance and load distribution

This stage is the toughest part. Not only the specified quadrant but a comprehensive evaluation and assessment involving teeth and temporomandibular joint should be done. Following the evaluation of missing teeth and existing prostheses, occlusal surfaces should be balanced. The use of mouth splint can be required to provide the joint and muscles balance and reduce loading forces on teeth in the pain side. If there are no missing teeth, mouth splint can be used straight away.

In addition to the difficulty of the treatment involving all teeth, the low number of experienced specialists to perform the splint therapy is a big problem.

The pain can be controlled shortly after beginning to use mount splints. However, the process can sometimes take longer. At this stage, neural therapy should be applied to the patient to keep the pain under control. In general, the pain severity of patients who need balanced load distribution is reduced. Reduction in pain severity facilitates the long-term third stage treatment.

Living with cluster headache is difficult, but if you follow and work on all of these steps, it is possible to treat cluster headaches.

# A Story of Cluster Headache in Middle and Older Aged Males

#### Before the Treatment:

"I am 57. I have been suffering from pain for 6 years. First my right eye started to twitch. I had an excessive sweating in the right side of my head. These symptoms occassionaly occured and went away. One day I drank a half bottle of beer. For the first time, I had severe pain starting from my nape and locating in my forehead and right eye. My eye became red and watery. I went to the headache centre in Germany. I was diagnosed with cluster headache. I had persistent pain and no medication worked for me. Finally I was given cortisone. I didn't have any headaches for 8 months but I became diabetic. Then it restarted. My teeth were in a bad condition so I had to have all of them extracted. I got dentures but my pain was still present.

Whenever I have a burning feeling in my feet, my headache starts as well. The pain starts from the back of my nape behind my ear and spreads to my eye. As well as my eye getting watery, my nostril in the same side is also congested first and then gets runny. In the meantime, even though I don't have any teeth left in my mouth, I have excessive pressure in my jaw which feels like it is about to explode. Rinsing my mouth with cold water relieves the pressure. Cold and dark feels good. When I feel the pain is about to start, I go out on the balcony, take a cold shower and lay naked on glazed tile.

I sometimes have it once and sometimes 5 times a day. I sometimes have 4-5 pain free days but I don't have remission period lasting two or three months like I used to after the cortisone.

#### How was it treated?:

There were very few teeth left in patient's mouth. In the area where the pain is located a tooth decay was cleaned. It was considered necessary to renew the partial prosthesis (partial denture) which he was currently using. A balanced occlusure was provided and new dentures were redone accordingly. His continuous headache which had been going on for months kept under control.

# The Characteristics of Cluster Headaches in Middle or Older Aged Males

Although cluster headache is known as a young male disease, it can also develop at older ages. Male patients with cluster headache onset after 40 years of age are either chronic, become chronic or even though their attacks are episodic, they experience a more severe disease course than the sufferers having a young age of disease onset.

"I am 45 years old and I started to have headaches 11 months ago. Thinking it was tooth related, I got my wisdom tooth and neighbouring molar tooth extracted. Following the extraction, my headache was followed by 10 pain-free days and then recurred. Now, I take six or seven pain killers a day. Pain eases for short time and then restarts."

"My headaches began when I was 39. My headaches which lasted 2-3 hours a day went away in three weeks time. Next year the frequency of my headache went up to two months. I had headaches lasting three months in the following four years. I also started to have 2-3 attacks every day. This year I have had 5 attacks. I experience 4-5 attacks every day. It never ends."

Sufferers with the cluster headache onset after 30 years of age follow a periodic cycle like the cluster headache pattern in twenties. The only difference is that the attacks tend to be longer. My patient started to have cluster headache at the age of 50 which is a rare case. His headaches were chronic since the beginning. He hardly had periodic headaches. On rare occassions, it can start at young ages and go into remission for long years and recur in elderly.

Persistent hypertension which develops during attacks is recognisable in patients whose headaches start at an advanced age. Blood pressure can be very high in middle aged patients who suffer from cluster headaches during attacks. Mature patients suffer more severely though. This condition is rarely seen among young people.

We encounter patients with no teeth in the advanced age group. These patients can even oppose the treatment saying "You state my pain is tooth related but I don't even have a tooth in my mouth." The pain is controlled by adjusting or renewing the total prosthesis (dentures).

In the assessment of older male patients with unilateral eye and temple pain, 'temporal arteritis' should be considered before cluster headache. Pain can be very severe in temporal arteritis as well. Left untreated, permanent loss of vision and systemic problems can develop and cause permanent damage. It is diagnosed with the symptoms like continous presence of pain, swelling of the temporal vein on the side of the pain, an elevated sedimentation rate in the sedimentation rate test which measures the coagulation of blood and the sinking speed.

# A Story of Cluster Headaches in Females

Before the Treatment:

-My headache started at the age of 20 and has been goin on for 8 years. I am hopeless about my disease now. I have consulted so many doctors and tried so many different medications. I have put on twenty kilograms because of cortisone. My headaches recurred 3 weeks ago. At first I took the medication but they don't work for me so I stopped taking them. I experience attacks at least 3-4 times a day which last about an hour. I came here at the insistance of my fiance. I don't believe I can get any better.

-I do understand your experience and emotions. The majority of my patients were in a similar situation. Firstly could you please tell me how your pain is?

-It hasn't changed in 10 years. The pain starts over my right eyebrow and radiates to my forehead and temple. My eye gets swollen, red and watery. My right nostril gets congested and runny when my pain starts to improve.

-Your pain is more severe in your eyes and around your eyes. Are there any regions where you get milder pain?

-I get tingling pain towards my upper back teeth on my cheekbone.

-Has your upper wisdom tooth in that side come in or do you still have it?

-As it was decayed I had it removed.

-Do you have any other tooth decay?

-No, my teeth are very healthy.

How was it treated?:

The cause of my patient's cluster headaches which started at the age of 20 was her wisdom tooth. Actually, as her tooth was extracted when she was 26, she had remission period for 2 years. A tiny decay which can't be even seen in the dental film caused the pain in the last period. On the same day she had her filling done, her pain completely disappeared. She called three years later. She gave birth a week ago. She told me that her headaches recommenced. A mild decay in her tooth which wasn't as deep as her previous tooth decay was cleaned. She had cluster headache nearly two weeks later. It wasn't that severe but it involved the characteristics of her previous headaches. She

didn't know what else to be done and as she didn't have any tooth decays. I told her she was clenching her teeth, then. She wasn't aware she was clenching her teeth but in the assessment of the related specialist it was detected that she had been clenching them a lot. She started to use mouth splint and her headaches completely disappeared.

#### The Characteristics of Cluster Headaches in Females

Cluster headache is less common in women than in men (a ratio of 9:1) A male patient asked me "Is it less common for women to have wisdom teeth than men? Why is cluster headache less seen in women?" and I replied "Women also have wisdom teeth but they generally cause migraine in women."

I have observed that the the characteristics of the disease in female patients are different than the characteristics in male patients:

- In general, cluster headache is less common among women than men which is less obvious in cluster headache in middle and advanced ages.
- The use of corticosteroids (cortisone) inevitably causes chronic headaches. This situation is less common among women. Cluster headache which starts as episodic and becomes chronic is mostly caused by long term use of cortisone.
- Chronic cluster headache in women generally starts as chronic. My female patients suffer from cluster headaches for longer period of time than my male patients with cluster headache.
- While cluster headaches developing in males over 40 tend to become chronic or severe, the same condition is experienced in women at the age of 25. In general, episodic cluster headache is seen in female patients with cluster headache onset before 25 years of age. In general, cluster headache in women which developed after 25 years of age were chronic or irregular and severe.
- Men with cluster headache only have had this disease and haven't developed headaches such as migraine or tension headaches throughout their lives. The majority of women having cluster headaches suffered from migraine and other

- types of headaches before cluster headache attack period, in remission periods or after attacks.
- Men with cluster headaches hardly had headache history of headaches in their family. On the contrary, the majority of women had history of migraine and headaches in their family.

# A story of Chronic Cluster Headache from the Onset

Before the Treatment (the patient):

"I have been having headaches for 22 years. My headache starts from my teeth and side of my nose. It feels like having something like a poker stuck in my nose and the pain spreads to the right side of my entire head. It feels like back of my eyes are being carved circularly and the pain sreads to my nape. Touching my forehead, I have burning sensation as if there was a wound. My eyes get watery and warm fluid runs down my nose. I feel as if my right side was swollen a lot. It happens 7-8 times a day lasting from 20 minutes up to 1.5 hours. The most severe headaches are the ones happening in the small hours. When I started to have cluster headaches at the age of 25, they would strike once a week. The frequency of them increased with time. There hasn't been any pain free days for the last 5 years. I have been treated so many times, been hospitalized as well. Being given oxygen shortened the duration. When I took cortisone, the duration reduced to 45 minutes but taking cortisone for long time caused fungal infection in my mouth and couldn't use it for long time. I had injections applied on my face so many times which didn't help. The blood pressure medication prescribed decreased the frequency of attacks per day from eight to five or six. After some time it started be ineffective. I even envy some of my friends getting daily migraine headaches. My pain is so unberable. Both my family and I got depressed. I had pyschologial treatment but it can't be helped."

# After the Treatment (the patient's daughter):

"When we found the video about cluster headache on the internet, my mother cried. Thinking it could be effective, we advised her to go to the clinic. She previously had canal treatment done on her canine tooth which hurt. She even went to the Faculty of Dentistry where she was told she didn't have any problems and got some injections done to prevent the pain. In fact, she had to have her root canal treatment redone. After the renewal of her root canal treatment, the frequency of her headaches reduced to four times a day. We became hopeful. She was clenching her teeth without realizing so a mouth splint was made and her pain started to improve with time. My mother goes to Istanbul

once a month to check the fit of her mouth splint and have it adjusted. Her pain is going away. She has an attack once every three or four weeks and she has her mouth splint adjusted. Now, she hardly has pain but her doctor says it takes a little more time for her jaw joint to be completely treated. You won't believe how much my mother has changed. She even comes with us when we go out. She is always so cheerful. We haven't seen our mother like this since childhood. The whole family is so happy now..."

# The Characteristics of Cluster Headaches with Chronic Onset

It is accepted as 'chronic' when cluster headache lacks its periodicity which is a typical characteristic feature and continues without any remission periods for a year. Cluster headache with chronic onset is rarely seen in men.

"I am 45 years old. I had severe pain in my left upper molar tooth and had root canal treatment in the same day. That night I experienced my very first cluster headache attack. I suffered every night in my first year with cluster headache. Then I started to have it in the mornings as well. When I was given a cortisone shot, I didn't get headaches for a month but it got even more severe afterwards. I can control the pain with injection for migraine for some time but it recurs. My whole life is ruined. My position at work has been affected negatively. I couldn't get married, I couldn't consider being a mother. My mother's grandfather suffered from similar pains and I was told he had committed suicide because of his pain."

Sample stories of cluster headaches which start as chronic at a young age mostly belong to women. Cluster headaches in men with the onset of 40 years of age have a tendency to become chronic in a similar way.

"I am 61 years old. I have had this pain for 15 years now. In the beginning, I would have headheache free intervals lasting 3-5 days. I have been having headaches lasting one and a half hours every other day and sometimes even every night for years."

In general, cluster headaches involve the feature of periodicity. Cluster headache with chronic onset is not common since chronic headaches mostly start periodically and become chronic (especially in sufferers using cortisone) in time.

#### The Effect of Cortisone Use on Cluster Headache

Corticosteroids (cortisons) are mostly used in cluster headaches and less commonly in migraine on the condition that patient does not respond to the standart medications. When patients suffer from the effects of excruciating pain, cortisone is able to alleviate that pain in almost all of them and is very similar to a knife cutting through the pain and restoring the patient back to peace. This analogy is very fitting when describing cortisone because its actions is just like a knife with two sharp edges. On one hand it cuts the pain, on the other hand it can cause dangerous effects. Apart from damaging the immune system, it also changes the character of cluster headache and causes it to switch to chronic.

Following the first cortisone intake, patients do not have any attacks for one and a half year. Afterwards attacks reccur and patient is given cortisone again. Cortisone diminishes the pain but it does not relieve it completely. Patients' attacks which have been periodic for years spread over the whole year. In addition, attacks increase in duration and in frequency per day. Now the patient cannot get rid of headaches and constantly uses cortisone.

These patients are told "Cluster headaches in some patients can become chronic and your condition has also become chronic." Patients who consulted me after using numerous corticosteroids complain saying "Cortisone has ruined my life. Before using it, at least I would get cluster attack once a year which would start and end within a month. Now I constantly have it. The frequency of it also increased so much. I cannot get rid of cortisone."

The adverse effect of cortisone should be taken into consideration by the doctors applying medical treatment and corticosteroids use should be avoided especially in the first attacks. As Dear Physician Hahneman mentioned, "Doctors shouldn't find temporary solutions for the diseases which can relieve the patient temporarily, but cause serious conditions in the long term."

### The Role of Dental-Jaw Complex in Migraine

If investigated well, it is possible to find some characteristics of cluster headaches in some migraine patients. The pain is always one sided and can spread to the region surrounding the eye, temple, cheekbone and upper jaw. Being affected from the pain, the eye becomes swollen, smaller, red and nostril can be congested. Migraine attacks can occur at certain times which is also a characteristics of cluster headache. The frequency of migraine attacks can be once-twice or three-four times a month. They don't strike periodically. If the pain is questioned well, it is also possible to find out that migraine attacks increase in frequency —not as obvious as cluster headaches—especially in seasonal changes. Compared to cluster headaches, migraine is less severe. Migraineurs don't wander in the house restlessly like chronic headache sufferers, they mostly lie down. The duration of a cluster headache attack can also last all day like a migraine attack.

"I am 30 years old. My headaches started when I was in secondary school. Since then I have been having half sided headaches. Firstly, my headache feels like something sharp is being thrust into my temple and pain along with the feeling of pressure is located in my eye. My eye becomes red and watery. My attacks which last almost one day recur twice or three times a month. As light makes the headache worse, I prefer to sleep in a dark room. However a migraine attack can sometimes come out of nowhere with no reason, stress, wine and wind can also trigger it."

Sweating occurs less than cluster headache and more than migraine. Sensitivity to light and sound along with nausea and vomiting can occur but these symptoms are not so obvious.

"I am 41 years old. I have been having headaches during my periods for long years. It never changes, I always have pain in my left temple which spreads to my eye. Even taking painkillers don't help." These patients' response to medication is worse than migraine. Even if the they partially respond to migraine medication (vasoconstrictors) to improve the attacks, they don't respond to preventive medication which aims to reduce the attack frequency.

The treatment of these patients having the characteristics mentioned above should be accepted as cluster headache treatment. The interference field in these patients is also dental-jaw complex. If the stages of cluster headache treatment are followed step by step, the treatment can be successful. It doesn't matter whichever age it starts, if the pain of a migraineur is persistent unilateral and accompanied by temple and eye findings in one side, it should be considered that the interference field can be dental-jaw complex. In addition, if eye becomes red and watery and nose gets congested, it supports the diagnosis.

## What is Trigeminal Neuralgia? How should the Treatment be?

The trigeminal nerve is located on both sides of the face and divided into three parts in front of the ear (the region where the temporomandibular joint is located). The branches of the trigeminal nerve go to upper jaw, lower jaw and eye area. They carry all the sensations like temperature, pain, tingling, touching and pressure from the face, forward half of the hairy part of the head, eye, mouth, nose and 2/3 of the tongue to the brain. It is also responsible of the function of mastication(chewing).

Neuralgia is nerve pain which feels like electric shock, tearing, stabbing and pinning. The pain is so severe and distressing that it cannot be described by other kinds of pains. Trigeminal neuralgia is a pain disorder which starts from upper or lower jaw and spreads to the region of the trigeminal nerve and lasts few minutes. As it can start without no reason, chewing, swallowing, drinking something hot or cold, speaking, touching the face (facial washing, shaving) and sometimes even a slight breeze can trigger the pain. It can repeat continously following the onset. Some patients feel so much pain that they cannot even eat, brush their teeth, speak or even swallow.

Trigeminal neuralgia is a clinical picture which is known for hundreds of years. Many kinds of different methods are implemented in its treatment and some have become successful to a certain extent. Because of the sudden same type of contraction of facial muscles, it is also known as 'tic doloureux'.

Trigeminal neuralgia is a bit more common among women than men. Although it can also be seen at a young age, it is mostly an advanced age disease. Fundemantally, there is a pathological structure stimulating the trigeminal nerve. Despite the fact that it has not been identified in classical medical practice yet, it is clearly seen in the expressions of patients. Almost all patients with trigeminal neuralgia are aware that tooth is the origin of pain. Occassionally, following dental treatments, pain can temporarily wear off. Because the pain recurs, it is concluded that pain is not related to tooth by the doctors.

As I have mentioned before in this book, difficulties in specializing in dentristry emerges as an obstacle to the treatment. There is a problem like decay or missing canal in the tooth which triggers the disease. After neuralgia starts, the treatment of this tooth only (even the extraction of this tooth) does not completely improve the pain. In the second stage, balanced occlusion of teeth and mouth splint should be provided. Because even it is a tiny filling, the integrity of teeth is deteoriated. Normally, the stimulus from this tooth won't trigger the pain but extra loading force on the tooth causes it. For the very reason, while evaluating splint therapy, the borders should be extended. A precise treatment to be performed by specialized prosthetists without investigating a significant problem in the temporomandibular joint will be successful.

Trigeminal neuralgia is the negative stimulation of the nerve in the level of neuralgic pain. On the other hand, starting with the negative stimulation of the nerve, cluster headache is a series of autonomic nerve disturbances mainly involving the area where the nerve is located. For this reason, the indications are different, but 'the cause and the treatment' are the same. The stages of cluster headache treatment mentioned above apply to trigeminal neuralgia. However, providing balanced load distribution on teeth which is the third stage only in cluster headache treatment, is a must to combat the disease. Some cluster headache sufferers can recover without going through this stage of treatment.

My 19 year old male and university student patient had trigeminal neuralgia caused by his right upper jaw. He first had pain one and a half years ago. The pain went away with medication in short time. The pain recurred in the same region a week ago. This time medication wasn't effective. He mentioned having strikes so frequently that they hindered him from studying. His upper right tooth was decayed and he had a filling treatment for it. His pain diminished immediately and disappeared in 4-5 days. The patient called me again some months later. His pain recurred but it wasn't as severe as it used to be. It was detected that he was clenching his teeth so much. He started to use mouth splint. His pain has not recurred for so many years.

A doctor in his eighties called me from Ankara. He had trigeminal neuralgia for 8 years. He was referred to a specialist in Ankara and some adjustments were made in his prosthesis. Following the process, his illness improved. He called me later on saying that, "They even advised me to have a brain surgery. None of my colleagues told me tooth was the origin of the pain. So the treatment was so easy...". He was told that the treatment wasn't actually as easy as he thought, he was assessed by a specialist in prosthesis and so many dentists would tell he didn't have any problem.

The treatment is not always so easy. My 31 year old female patient had neuralgia which started as toothache in the left bottom 7 years ago. She wasn't able to speak because of it and hadn't eaten for days. Her relatives told that firstly her wisdom tooth was extracted and few months later she had root canal treatment on one of her molar teeth which was extracted later and had prosthesis made. Due to her constant pain, she had to have open brain surgery five years ago. As it didn't cause any relief, she had gamaknife radiosurgery a year later. Afterwards she had alcohol injected on her nerve endings in her lower jaw. But none of the treatments worked for her. Due to deterioration of her blood chart values caused by high dose medication use, she had to be hospitalized 2 weeks ago.

The patient's molar tooth decay was so serious that the root canal treatment couldn't save her tooth. She had three other rotten teeth and deficient root canal treatment. Firstly her molar tooth was removed. Following this procedure, the patient was able to eat and speak. Afterwards, the treatments of other teeth were completed and her pain went away. As her hindmost tooth was extracted as well, she didn't have any teeth on her chewing surface in the back right side of her mouth. Her pain recurred in the following months. Prosthetic planning for this side and using dentures to prevent teeth clenching were required. This phase of her therapy was longer.

We managed to prevent my patient who is a brain surgeon from having a surgery and treated him. My patient told that when he started his dental treatment two years ago, he had pain in the area where his right bottom tooth had been extracted and his tooth pain started to involve neuralgic feature. Because the dentists assessing his teeth told that he didn't have any problems in his teeth, the faculty board reached a conclusion for the open brain surgery. He consulted me incredulously with the suggestion of his friend in the faculty of board.

The dental treatments done previously didn't seem to have any problems. He was referred to a specialist to control the balanced occlusion of his teeth. Having an unspecific problem with his teeth occlusion, he was given mouth splint. He was convinced to replace the prosthesis as his pain diminished in severity. His prosthesis was changed and his mouth splint was renewed. His treatment was completed in two years. The patient who called me afterwards said, "I didn't trust you in the beginning. But I am so thankful to you that you prevented me from having a surgery."

In the treatment of trigeminal neuralgia, teeth should be evaluated first as teeth connect via nerves to every part of the body. If there is no problem in restorative and endodontic treatments (tooth decays or canals), balanced occlusion of lower and upper jaws should be checked by a Temporomandibular Joint Disorder (TJD) specialist.

# An Approach to Cluster Headaches with the Features of Trigeminal Neuralgia

Trigeminal neuralgia and cluster headaches are the same kind of diseases with the same cause. While the nerve function is disturbed in one of them, autonomic function is disturbed caused by the nerve in the other one. Therefore, some patients can have both of the diseases.

#### Before the Treatment:

"I had very severe pain in my left side which appeared and stopped suddenly and repeated four or five times two years ago. I had similar pain in my right side eight years ago but the pain hasn't gone away this time. I have been having pain in both sides for 2 months. I also get headaches almost everyday which recur once or twice and sometimes last half an hour and sometimes two hours. Some days attacks can occur in my right and then in my left side. The pain is like the kind of pain mentioned for cluster headache. My eye aches, becomes swollen and my nose becomes stuffed. I also get pain which feels like electric shock coming from my upper teeth. On the days when these strikes happen so frequently, my cluster headache attack becomes so severe as well."

#### How was the treatment done?:

"After deficient root canal treatments in both sides were redone, she had some relief. As she had excessive teeth clenching problem, a mouth splint was prepaired for her. Her wisdom tooth which affected the movement of her jaw was extracted. At this stage the teeth triggering the pain changed constantly. The patient didn't want to have root canal treatment on almost all of her teeth. She didn't have any canal treatment as the condition would last until stabilization was provided by occlusal splint treatment. It took a long time for the occlusal splint treatment to reach a certain stage. Sometimes, the occlusal splint had to be adjusted nearly every week. She got over cluster headache and trigeminal neuralgia at the end of the year.

# An Approach to Cluster Headaches with the Features of Trigeminal Neuralgia

In some patients, the duration of attacks with the features of cluster headache is similar to trigeminal neuralgia. It involves the features of trigeminal neuralgia such as duration of attacks being a few minutes, recurring several times a day, activities like chewing and speaking triggering the pain. These patients experience pain and redness in the eye and stuffed nose instead of flashing or electric shock like pain which disappear within a few minutes.

"I have been having pain coming from my right upper jaw for the last four months. It feels like the pain is radiating from my teeth but my eye hurts the most. It feels like someone is poking through my teeth and out through my eyes as if there was a way through my nostril going to my eye. The pain lasts several minutes. It happens only once on some days. It can recur many times throughout the day. My right nostril also gets blocked in these days. My doctors told me that it was similar to trigeminal neuralgia but without feeling electrified. I thought my pain experience was like cluster headache symptoms except for the duration. My pain lasts for short time."

In some patients, all the symptoms are intertwined. Patient can suffer from pain like migraine lasting all day long and alongwith it, he can have attacks similar to cluster headache attacks in terms of severity, duration and the features of pain. To top it all, flashing and electric-like pain can develop. Pain which meets the criteria of migraine, cluster headache and neuralgia can all happen in different times or in the same day.

"I have been having pain like tooth decay pain in my left jaw since university years. I have consulted so many dentists because of it. I was told that I had a cysts and had a canal treatment. Afterwards my tooth was opened so many times and then pulled out. The pain didn't get any better. Firstly, my pain starts with a throbbing sensation over my ear. The root of my mouth right in the middle feels like burning and strikes my eye. My eye becomes smaler. I feel like putting my eye out of its socket. The pain can go away in one or two minutes but can last half an hour or the whole day. It occurs more frequently during my periods. I have had migraines since high school. My migraine improved in years but these pains increased in frequency. I haven't been telling people that I have headaches, but I have been telling them I have a toothache. Whenever I get this kind of pain I brush my teeth as I feel as if something was stuck between my teeth. It has been going on like this for years now."

# **Headaches with Prominent Vision Symptoms and The Treatment**

Eye is the most affected organ in migraine and other headaches. Eye can become red, swollen and smaller in some migraineurs but mostly in cluster headache sufferers. Some patients consult an eye doctor first.

### Before the Treatment:

"I am 34 years old. My first headache which lasted fifteen days occured when I was in university. It recurred while writing my PHD dissertation and lasted three months. It restarted again two months ago. I have been pain free for three months but now I have a blurred vision. I was told that I had papillitis (swelling and damage of the optic nerve which enters the brain ) and was given cortisone for five days. My vision got a bit better but then it became blurry again. According to the new eye examinations I was told that I had ischemic optic neuropathy (there is insufficient blood supply to the optic nerve and it is damaged). I don't care about my headache anymore but I am so scarred of losing my sight. They are unable to find an exact cause for it. I was told that the features of my headache resembled cluster headache that's why I've consulted you."

#### How was the treatment done?

The pain character of the patient resembled cluster headache. As his vision symptoms occurred alongwith the pain, it could be related with this medical picture. He had a deficient root canal treatment in his pain side. He was very stressed and scared so he continued his treatment with the eye doctor for another week. As his blurry vision started to deteriorate, he decided to have the recommended root canal treatment redone. In the days after his root canal treatment was renewed, his vision and his eye examination findings were improved.

The conditions in which the optic nerve is affected such as papillitis (swelling of the optic nerve), visual loss, blurred vision, as well as in symptoms like constant swelling of the eye,etc., teeth should be considered.

"I woke up with pain in the area around my eye one night in spring six years ago. My eye became all red, swollen and was closed. My eye started watering as if I had been crying. I couldn't bear the pain. I stayed in A&E of the faculty for 4 days. Neurologists and opthalmologists discussed my condition but they weren't able to diagnose it. It disappeared on its own. It recurred in April the following year. Same like before, they couldn't diagnose it. They put me to sleep with cortisone on the third day."

"I have been having pain with the duration of one week which causes my eye to close and starts from the area around my eye and goes down to my upper jaw for the last six years. It is so severe that it feels like somebody is dislocating my upper jawbone. Although I have worked as a nurse in a dental clinic for years, I wouldn't even imagine that a problem in the tooth could be the cause of this disease. I started to have dental treatment and neural therapy. My eye was opened even in less than one week. My pain went away."

There is a link between high eye pressure (glaucoma) and cluster headache as well. My young male patient whose headache started two weeks ago consulted an eye doctor and according to his examination he was found to have high eye pressure and given medication. After his wisdom toothwas extracted, his pain went away. As his eye pressure was normal in his following eye examination, he stopped using the medication for glaucoma. Eye pressure is not measured especially during cluster headache attack. In my opinion, his eye pressure may have increased during his attack period.

My father also experienced the same condition. He had a severe vision loss in the last period of his life due to high eye pressure lasting for several years. When I was an assistant professor of neurology, he suffered from severe headache. While I thought it was the onset of cluster headache, according to the eye doctor it was glaucoma crisis as his eye pressure was measured high. With my experience today, I come to conclusion that his glaucome crisis and cluster headache occured at the same time.

## A Story of Migraine Attacks Caused by Temporomandibular Joint Problems

#### Before the Treatment:

"I have been having headaches since I was 20. I was at university in Ankara. They told me, 'I was clenching my teeth' and advised me to use mouth splint. When my headache and jaw pain got worse at the age of 28, I got my mouth splint made. I used it for a year. My pain didn't get any better. Then I stayed in Canada for many years. My pain got more severe. I got my orthodontics make a mouth splint for me again 8 years ago. I used it for a long time. I returned back to the university in Istanbul three years ago. My pain increased a lot. Even if I drink a sip of water during the attack, I vomit. Migraine medications worked before, but not anymore. When I was in Canada, I discovered that taking muscle relaxants and loosening up my jaw relieved the pain. Whatever I do, I cannot relax my jaw joint.

I get much more severe pain if I have given lecture for long time. I try to arrange my lessons with intervals. I haven't been able to chew properly. I don't feel comfortable in bending my head forward. My headache starts immediately. I cannot work. I had to leave my book half finished, there are so many articles I need to write. I have received an invitation from Greece for next months, but I am not going to accept it. I cannot speak for that long. The last neurologist I saw prescribed me epilepsy medication. I am so desperate. I guess my academic life has come to an end. I don't believe I can be treated. Everyone says there is no cure for it."

#### After the Treatment:

"When my doctor told me the only cause of my experience was the problem in my jaw joint, I cannot say I was surprised as the link between my headache and jaw pain had always drawn my attention. What surprised me was a mouth splint could lead to so much change. My doctor told me that there were only a few physicians who could do the effective treatment and it was likely my previous mouth splints weren't made correctly. The professor she referred me did not find my previous mouth splint appropriate. They forbade me to chew first. My pain gradually diminished during the occlusal splint treatment. I did my presentation in Greece. I am pregnant now. I am working on my second book"

## Migraine Caused by Jaw Joint Problems (Temporomandibular Joint) and Teeth Clenching

A group of patients who have severe headaches with the start of their work life and don't respond to treatment are thought to have chronical migraine and tension headache. Some patients suffer from intermittent attacks in childhood and adolescence. Some of the others have started to get pain in recent years. Some patients are tried to be treated according to migraine diagnosis, but they have myofascial pain. Since all of these patients are prone to migraine, with their jaw joint and teeth clenching problem, their migraine attacks were also triggered. This clinical picture of intertwined symptoms can be considered as migraine as a whole. Because it is continous and its severity increases with stress, it can also be considered as tension headache. In fact, when the discussion with patients is directed correctly, they realize the connection saying "Whenever I have headache, I get jaw pain as well".

Unbalanced jaw joint and occlusion of teeth and teeth clenching are very common in society. Many people are not even aware that they are clenching their teeth. It doesn't necessarily mean they are not clenching their teeth just because they don't make any sound while sleeping. Teeth clenching without grinding is more harmful for the system. Teeth clenching and temporomandibular joint problems have a big effect on migraine. In some cases, it is the only reason.

If temporomandibular joint problems are in a serious level, occipital neuralgia can accompany the clinical picture as well. The occipital nerve is the nerve which goes upwards from the bulges of the head and provides the sensation of scalp in both sides of the head. Spasm in the muscles constantly compresses the nerve spreading from the back of the head and causes abnormal and unpleasant sensations such as burning, electrification, numbness, tingling and stabbing moving upwards.

My patient who had been suffering from very severe headaches which spreaded and had a compressing effect on her whole head for nearly two years with sudden neuralgic pain coming from the back of her head didn't have the strength to bear it anymore. Speaking and

movements of the head caused severe pain similar to flashing pain. As she was unable to speak, her husband and mother told her story. She was working in the genetics department at the university. She followed up her treatment with two professors from the neurology and pain clinics at the same university. But as time passed, her condition got even worse. The medications and interventions used couldn't provide a solution. She was being treated with drugs for migraine and occipital neuralgia. The patient had severe teeth clenching and temporomandibular joint problem. When the patient was told how her condition occured, she said, "I guess you are right. During the periods when my neuralgia and headache got worse, pain in my jaw also increased." Because her findings were very typical from her field. Following her occlusal splint treatment, her pain disappeared and she didn't need medication anymore.

I came across a similar situation during the period of my neurology assistantship. I felt better with the injections applied in the pain clinic. Over the years, I noticed that link between occipital neuralgia and muscle spasm and tension. I observed that the patients with occipital neuralgia benefited more from muscle relaxants during the period of my previous medical practice with medication. Now, I know that research on jaw joint which uses head-neck region the most, solves the problem effectively. The fact that the number of specialized dentists in this field are so few makes it very difficult for the treatment to be applied on high number of patients.

When resolving the pain, it is always necessary to assess the underlying causes. If not approached and worked this way, the clinical picture which is so typical for the specialist academician as well as the patient can be unsolvable for the other academicians.

### What is Stabbing Headache? How is it treated?

Stabbing headache causes momentary and sharp pain. As it can recur frequently throughout the day, it can happen just a few times a year as well. It is distinguished from trigeminal neuralgia due to lack of electrified feeling. However, the pain is located in chin, eyes, temple and forehead, in short in the trigeminal nerve region. As according to classical approach, the cause of stabbing headache is unexplained and 40 percent of migraineurs experience it, it is specified to have link with migraine.

This pain is associated with temporomandibular joint. A specialist in this field will be able to detect the related triggering points immediately as he examines the patient. When asked, the patient will also tell that he chewed hard or dense foods during the period he got pain or has been overstressed recently. As well as hearing similar stories from many different patients, I also had to experience it myself.

Along with a life story with migraine, my teeth were misaligned because of an extracted tooth in high school and I was also clenching my teeth. It can be said that I had temporomandibular joint problem. I felt the similar pain two hours after learning some sad news which also annoyed me. Without even realizing, I clenched my teeth so hard that I had to eat soft food only for a couple of days. Whenever I tried the chewing action, I felt the stabbing pain in my face.

The patient experiencing this pain should primarily minimize his chewing action and eat food like puree and soup. If neural therapy is also applied to the patient, the severity of his pain will decrease even more. The patient should be referred to a dentist specialized in this field as soon as possible and use mouth splint if necessary.

# Hypnic Headache, Headache Awakening Elderly People at Night and the Treatment

This headache, mostly seen in the elderly only develop at night and awakens the patient. The duration of hypnic headache can vary from 15 minutes to 3 hours. It mostly occurs 2-3 hours after going to sleep. Firstly, it is felt widespread and not very severe. It responds well to medications like cafein and lithium taken at night.

The cause of the illness is related to the way it occurs. The pain which appears after sleeping develops with teeth clenching. These patients must probably be clenching their teeth while asleep.

In the treatment of these patients, dental-jaw complex should certainly be evaluated. The load distribution of total dentures especially in the elderly can be unbalanced. Even if the denture was initially done correctly, the prosthesis may become unbalanced as a result of resorption. Teeth clenching during sleep triggers the pain.

Adjustment and renewal of prosthesis by a specialist is required in the treatment. In addition, the patient should be advised not to remove his dentures at night and mouth splint should be made, if necessary.

Thus, no medication is prescribed to the elderly. They generally have so many other medications they use. Balancing jaw complex also reduces loss of hearings, if any, tinnitus and dizziness. Elderly patient doesn't only get rid of his pain, this way a preventive treatment is provided for him as well.

This book has made an attempt in understanding the stories of those patients suffering from migraine attack and headaches and has just scratched the surface of understanding. There will be many more stories to follow but this book is the start to deepening our knowledge and provides some solutions to a widespread problem.

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