

Massage and Migraines Home Study Course

6 CE Hours
Text and Online Study Guide

Presented by the:
Center for Massage Therapy Continuing Education

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It is the responsibility of the practitioner to determine the appropriateness of the principles presented in terms within the scope of practice. This information is in no way meant to diagnose or treat medical conditions.

Instructions for the Massage and Migraines home study course

Thank you for investing in the *Massage and Migraines* home study course, a 6 CE hour course designed to further your knowledge on the subject of migraines and how they relate to the practice of massage therapy.

This guide will contain all of the instructions you will need to complete this course. This is a 6 CE hour course, so that means it should take you approximately 6 hours to read the text and complete the examination and course evaluation.

PLEASE READ THE FOLLOWING DIRECTIONS FOR COMPLETION OF THIS COURSE.

The following are steps to follow in completing this course:

- 1. Read the instructions and review the text and exam.**
- 2. Access the online examination in your account at www.massagetherapyceu.com.**
- 3. Complete your examination and print your certificate. The exam is open book and there is no time limit for completion.**

You must pass the exam with a 70% or better to pass this home study course. You are allowed to access and take the exam up to 3 times if needed. There is no time limit when taking the exam. Feel free to review the text while taking the exam. There are no trick questions on the exam. All of the answers are clearly found in the text. The exam is also included at the end of the text for review before taking the exam.

It is advised to answer the exam questions in the study guide before testing online.

Good luck as you complete this course. If you have any questions please feel free to contact us at 866-784-5940, 712-490-8245 or info@massagetherapyceu.com. Most state boards require that you keep your “proof of completion” certificates for at least four years in case of audit. Thank you for taking our *Massage and Migraines* home study course.

Massage and Migraines Text

Overview of Migraines

To best treat migraines with massage therapy, the professional massage therapist must thoroughly understand the medical condition called a migraine. This home study course summarizes the important things a massage therapist must understand when helping clients with migraines. These things include but are not limited to:

- Migraine Statistics
- Migraine Signs and Symptoms
- Migraine Triggers
- Migraine Pathophysiology
- Risk Factors for Migraines
- Migraine Prevention
- Diagnosis of Migraines
- Treatment of Migraines
- Prognosis for People with Migraines
- Massage Therapy and Migraines
- Types of Massage Used with Migraines
- Migraine Pressure Point Technique
- Migraine Pressure Point Locations
- Contraindications for Massage Therapy with Migraine Clients
- When to Refer Migraine Clients
- Migraine Resources
- Migraine Prevention for Massage Therapists

A migraine, also called the migraine headache, is a neurological syndrome. They are chronic headaches that cause intense pain for hours or even days. Migraine is an episodic primary headache disorder. It is characterized by severe headaches, nausea, and altered bodily perceptions. Symptoms get so severe that people with migraines just want to lie down in a quiet, dark place. This neurological condition is more common in women than men.

The typical migraine is unilateral which means it affects one half of the head. Pain is excruciating, throbbing, and worse with exertion. It is pulsating, severe, and lasts anywhere from 4 to 72 hours. General symptoms include nausea, vomiting, and extreme sensitivity to light, sound, or odors.

About one quarter to one third of people with migraine headaches perceive an aura usually before but sometimes after the headache. An aura is an unusual visual, olfactory, or other sensory experience. They are a sign that a migraine headache will occur soon. It is a sensory warning symptom or sign. Examples of auras may include flashes of light, blind spots, or even tingling in the arms and legs.

The exact cause of migraine headaches is unknown, but there are many theories. A common theory is that it is a serotonin neurotransmitter disorder. A newer theory suggests genetics are a factor. In 2010, researchers identified a genetic defect linked to migraines that could also be a cause.

Diagnosis is made clinically by a healthcare provider. There is no cure. Treatment of migraines usually involves analgesics for the headache, antiemetic for the nausea, and avoiding triggering conditions. Medications help reduce the frequency and severity of migraines. Prevention regimens include lifestyle changes, the right medications, self-help remedies, and of course, massage therapy.

Migraine Statistics

Migraine is the most common cause of recurring moderate to severe headache. Migraines are common and affect 12-28% of people at some time in their life. This figure is called lifetime prevalence. Lifetime prevalence doesn't provide a good idea of how many people there are with active migraine at any one time.

To understand how many people have active migraine at any one time, one year prevalence is assessed. Prevalence is defined as the number of cases of migraine in the population at a given time. One year prevalence is a statistic defining the number of people with one or more attacks in the previous year. In the US, one year prevalence rates of migraine for adult men are 6-15% of the population. For adult women, they are 14-35% of the population.

There is a strong relationship between age, gender, and type of migraine. Migraines usually begin in childhood, adolescence/puberty, or early/young adulthood. They come and go in frequency and severity over the years. They decrease by age 50. Research shows migraines can run in families.

Another statistic which clarifies how big of a problem migraine is in society is the incidence rate. Incidence is the number of first attacks occurring at any give age. It helps researchers understand how the disease grows and shrinks over time.

The incidence of migraine is related to the incidence of epilepsy in families. Migraines are twice as common in family members of epilepsy sufferers. Migraine headaches are also more common in epilepsy sufferers themselves.

Migraine Signs and Symptoms

A typical migraine attack involves some or all of the following signs and symptoms:

- Excruciating headache
- Extreme sensitivity to light, sound, or odors
- Moderate to severe pain
- Nausea with or without vomiting
- Pain interferes with regular activity
- Pain worse with physical activity
- Pulsating or throbbing head pain
- Unilateral or bilateral pain

Since the signs and symptoms of migraine vary among patients, it is difficult to describe exactly what a person experiences before, during, and after an attack. Commonly, four phases of a migraine are described. Keep in mind all these phases are not necessarily experienced by every migraine sufferer. The four phases are:

- Prodrome – occurs hours or days before the headache
- Aura – immediately precedes the headache
- Pain phase – also called the headache phase
- Postdrome – occurs after the headache

The phases experienced and symptoms experienced during them vary from one migraine attack to another in the same person. Let's examine each phase in more detail.

Prodrome Phase

A prodrome is a premonition or sensation a migraine is beginning. Prodromal signs and symptoms occur in 40-60% of people with migraines. They occur several hours or a day or so before the headache actually strikes. Possible symptoms included in the prodrome phase may include:

- Altered mood
- Constipation
- Cravings for certain foods
- Cravings for sweets like chocolate
- Depression
- Diarrhea
- Drowsiness
- Euphoria or elation
- Excessive sleepiness
- Fatigue
- Hot ears
- Increased urination
- Intense energy
- Irritability
- Loss of appetite
- Mood changes
- Nausea
- Stiff muscles particularly in the neck
- Thirst
- Visceral symptoms
- Yawning

As mentioned, these symptoms and others may precede the headache phase of the migraine attack by several hours or days. Experience with these warning signs and symptoms teach the patient and their family how to detect when a migraine attack is coming.

Aura Phase

The majority of people with migraine experience no auras. Only about one-fifth to one-third of those with migraine experience the aura phase.

The aura is any neurological phenomena preceding or accompanying a migraine attack. Auras are temporary and the disturbances may affect sensation, speech, vision, muscle coordination, and balance. Auras have a slow gradual onset over 5-20 minutes and last less than 60 minutes in total.

Typically, the headache phase or pain phase of the migraine begins within 60 minutes of the aura phase ending. On occasion, some auras may persist after the headache itself has started. On other occasions, the pain phase can be delayed up to several hours.

Some patients with migraine have an aura with little or no headache. The pain phase is missing entirely and this is called a silent migraine. A silent migraine has many different names and is a neurological syndrome. The names include:

- Acephalgic migraine
- Acephalalgic migraine
- Amigrainous migraine
- Isolated visual migraine

- Migraine aura without headache
- Ocular migraine
- Optical migraine

Despite all these names, it is relatively uncommon. The patient may experience aura, nausea, vomiting, sensitivity to light, and other migraine symptoms, but not the headache pain itself. Remember, symptoms of a migraine aura can be visual, motor, or sensory in nature.

Visual symptoms are the most common type of neurological event in the aura phase. Some of the possible changes in vision are listed and pictured below:

Possible Visual Symptoms of Migraine Aura

Perception of Zigzag Lines



Perception of Additional Structures



Blurred Vision



One-Sided Vision



Images used with permission from http://commons.wikimedia.org/wiki/File:Brandenburger_Tor_Blaue_Stunde.jpg

Motor aura symptoms may consist of trouble swallowing, speech disturbances, lack of coordinated muscle movements (ataxia), dizziness, and hypersensitivity to touch.

Sensory aura symptoms may consist of paresthesias. A paresthesia is a feeling of pins and needles or tingling and numbness with no apparent stimulation. It may be experienced in the hand, arm, nose, and mouth area. Typically, paresthesias start in one hand and extend on the same side to involve the lips, tongue, and whole face. Other sensory symptoms include auditory (hearing), gustatory (tasting), or olfactory (smelling) hallucinations.

Pain Phase

Migraines are more than headaches. A migraine headache throbs with moderate to severe pain. It is worse with exertion or routine physical activity. Remember, not all migraines are the same. Other presentations are possible. Pain may be generalized, bilateral, unilateral, alternate from side to side, pulsating, and/or vary from attack to attack.

The pain phase onset is gradual with pain lasting 4-72 hours in adults and 1-48 hours in children. Pain peaks and then decreases. The pain varies greatly in intensity. It often resolves with sleep.

The frequencies with which the attacks occur vary from person to person. Some patients have a few migraine attacks in a lifetime while others have several in a single week. The average person with migraines experiences 1-3 headaches per month. Some have them much less frequently than the average. Some patients develop chronic migraine. Chronic migraine is defined as having headaches 15 days per month or more.

The pain phase of migraine is accompanied by other features. In 90% of patients, nausea occurs. In about 33% of patients, vomiting occurs. Many experience extreme sensitivity to light, sound, and odors which drives them

to seek a dark and quiet place to lie down. Severe attacks are incapacitating and disrupt family and work life. Other features or symptoms of the pain phase may include:

- Blurred vision
- Cold moist extremities
- Delirium
- Diarrhea
- Feeling of faintness
- Lightheadedness
- Localized edema of scalp or face
- Mood changes
- Scalp tenderness
- Stiffness/tenderness of the neck
- Poor concentration
- Prominence of vein or artery in the temple
- Vertigo

Postdrome Phase

After the pain phase, there is great variability in what the person with migraine experiences. The person may feel tired, hung-over, and have head pain. There may be cognitive difficulties, gastrointestinal symptoms, mood changes, and weakness. Some patients feel refreshed or euphoric after a migraine attack. Others feel depression and malaise.

Migraine effects often persist for days after the main headache has ended. People with migraines report a sore feeling in the area where the migraine was. Others report foggy or impaired thinking for days afterward. Overall, the postdrome phase is variable from person to person like many of the other phases.

Migraine Triggers

A migraine trigger is any factor, which on exposure or withdrawal leads to an acute migraine attack. Triggers are categorized as behavioral, chemical, dietary, environmental, hormonal, or infectious. Triggers are called precipitants in the medical literature. Here is a laundry list of potential migraine triggers:

- Aged cheeses
- Alcohol
- Allergic reactions
- Anxiety
- Aspartame
- Beer
- Bright lights
- Caffeine withdrawal
- Certain foods
- Certain food preservatives
- Certain odors and perfumes
- Chocolate
- Clenching teeth
- Dehydration
- Emotions
- Emotional stress
- Excessive different stimuli
- Exercise

- Exposure to light
- Exposure to smoke
- Fasting
- Flashing lights
- Fluctuation in estrogen levels
- Genetic defects on chromosomes 1, 2, and 19
- Getting too much sleep
- Gluten
- Grinding teeth
- Head trauma
- Histamine
- Hormonal changes in women
- Hormonal factors
- Hormonal medications
- Hormone replacement therapy
- Intense physical exertion
- Jet lag
- Lack of food or sleep
- Loud noises or sounds
- Medications
- Menopause
- Menstrual cycle
- Missed meals
- Missed sleep
- Monosodium glutamate (MSG)
- Neck pain
- Nightmares
- Nitrates
- Oral contraceptives
- Overuse of caffeine
- Paint thinner
- Perfumes
- Physical stress
- Pleasant scents
- Pregnancy
- Processed foods
- Red wine
- Salty foods
- Secondhand smoke
- Sensory stimuli
- Sexual activity
- Sleep pattern changes or deprivation
- Smoking
- Sun glare
- Stress at home or work
- Temporomandibular joint syndrome
- Traumatic dreams
- Trigger points
- Tyramine
- Unpleasant or strong odors

- Unusual smells
- Weather changes

This list does not include all potential migraine triggers. Occasionally, a migraine occurs with no apparent trigger. The trigger theory proposes exposure to environmental factors start the migraine episode.

Because of this theory, patients are advised to identify personal headache triggers by looking for patterns between their head pain and suspected trigger factors. One way to accomplish this is to keep a migraine journal. They record their migraine attacks and their diet. Patients look for correlations in order to avoid trigger foods.

Triggers can be quantitative in nature. For instance, a small piece of chocolate may not bring on a migraine, but a whole bar of chocolate probably will in a susceptible person. Another example of their quantitative nature would be the number of trigger factors exposed to at one time. Being exposed to several trigger factors at the same time more likely causes a migraine than a single trigger exposure. Drinking alcohol and eating chocolate on a hot day when feeling stressed with little sleep is going to trigger an attack. One glass of wine on a cool day with plenty of rest and feeling little to no stress is not likely to cause an episode.

For people with migraines, avoiding all attacks is impossible. Keeping an accurate migraine diary and making a few lifestyle changes help dramatically. By limiting the avoidable triggers, the unavoidable factors have less of an impact on the person.

More studies on the causes or triggers of migraine attacks are needed. Some research does exist on migraines and dietary triggers like food and drink and on environmental triggers like weather. Below is a more in depth look at these two categories of triggers.

Dietary Triggers – Food and Drink

By identifying and avoiding dietary triggers, those with migraines often report less migraine attacks. The most common dietary triggers studied include:

- Aspartame
- Gluten
- Monosodium glutamate (MSG)
- Tyramine
- Others

Aspartame has not been proven to trigger migraines in the research. However, many people with migraine believe it is a trigger for them. In these cases, the person should remove all aspartame from their diet.

Eliminating gluten from the diet has been proven over and over again to reduce or eliminate migraines in most patients. For those with undiagnosed celiac disease, an autoimmune disorder of the small intestine, migraines are often a symptom of gluten intolerance. Research shows migraine patients are ten times more likely than the general population to have celiac disease. Gluten free diets eliminate or reduce migraines in these people.

Many patients report MSG as a dietary trigger, but the research is mixed on the value of removing it from the diet. Some studies show it is associated with adverse symptoms like headache. Other studies show no effect when given with food. The bottom line is if it bothers a patient, they should remove it from their diet. If MSG does not seem to trigger migraine attacks, removal is not necessary.

The National Headache Foundation has considered tyramine a trigger. They base this on the tyramine theory and provide a specific list of triggers to use with caution and others to avoid. Not much scientific evidence exists for the effects of tyramine on migraines. However, if a massage client believes it is a trigger for them based on experience with their diet, it should be eliminated.

Most information about dietary triggers comes from subjective assessments of patients. Some suspected dietary triggers appear to precipitate migraine episodes while other suspected dietary triggers have never been proven to cause attacks.

Research shows alcohol like red wine, caffeine withdrawal, dehydration, and missing meals were other common migraine triggers/precipitants. General dietary restrictions are not proven in studies to be an effective migraine therapy, yet it is still beneficial for individuals to avoid what has been a clear cause of migraine for them in the past.

Overall, triggers are individual. What affects one person will not necessarily affect another. The best policy is to have massage clients keep a migraine diary to identify common things acting as possible triggers for them.

Weather

Individuals and some studies report migraine attacks can be triggered by weather changes. The most common trigger weather events include changes in barometric pressure, significant changes in weather, and temperature changes mixed with humidity.

High humidity plus high or low temperature is the biggest cause reported in the literature. Overall, be aware that barometric pressure changes, weather changes, and humidity can prompt a migraine in susceptible people.

Migraine Pathophysiology

Despite all the information about migraine triggers, the exact cause of migraines is not well understood. Genetics and environmental factors seem to play a role. There are a number of theories about the cause of migraines. Some of the most popular ones include:

- Depolarization theory
- Neural theory
- Serotonin theory
- Vascular theory
- Unifying theory

Depolarization Theory

One possible cause of migraine is a phenomenon known as cortical spreading depression. In cortical spreading depression, brain activity is depressed over the brain's cortex. An electrical change takes place in the brain. Depolarization theory refers to an electrical change in the brain.

The depolarization or electrical change in the brain results in the release of inflammatory mediators. These mediators irritate the cranial nerve roots especially the trigeminal nerve root. The trigeminal nerve is responsible for sensory information for the face and head.

Support for this theory is mixed. Some report it is supported by neuroimaging techniques. Others call it speculative. It remains a theory nevertheless.

Neural Theory

Migraines may also be caused by changes in the trigeminal nerve. This possibly triggers the trigeminal system to release neuropeptides, which travel to the meninges (outer covering of the brain) and result in pain.

When certain nerves or areas in the brain become irritated, migraines begin. In response to the irritation, chemicals, which cause inflammation, are released. These chemicals cause more irritation of nerves and blood vessels and pain results.

Substance P, a neurotransmitter and neuromodulator, is one chemical released with the first irritation. It sends pain signals to the brain. Pain increases in response to the substance P.

Serotonin Theory

Imbalances in neurotransmitters like serotonin may also be involved. Neurotransmitters are communication chemicals. Serotonin is a neurotransmitter that passes messages between nerve cells. Serotonin is involved in controlling mood, pain sensations, sleep, sexual behavior, vasodilation, vasoconstriction, and many other things.

Serotonin levels drop during migraines. The serotonin theory suggests that low levels of serotonin in the brain lead to blood vessel constriction and dilation. This triggers the migraine attack.

Vascular Theory

In the past, it was believed migraines were due to problems of the blood vessels. This was and is called the vascular theory of migraines. The vascular theory is considered secondary to other theories and has been discredited by some.

The theory hypothesizes when blood vessels in the brain contract and expand inappropriately a migraine can begin. This may start in the occipital lobe, located in the back of the brain, as blood vessels spasm. The theory further states that the decreased flow of blood in the occipital lobe triggers the aura some experience in migraines since the visual cortex is found in the occipital area.

Vascular theory contends when the constriction stops and the blood vessels dilate, they open too wide. The blood vessels become permeable allowing fluid to leak into the surrounding tissues. The leakage is recognized by pain receptors. In response, chemicals causing inflammation are released. As blood passes through this sensitive area it causes a throb of pain. As mentioned, the vascular theory of migraines is seen as secondary to brain dysfunction theories.

Unifying Theory

Unifying theory contends migraines are a pain syndrome involving neurons and blood vessels. It involves altered central neuron processing and the trigeminovascular system.

Altered central neuron processing includes spreading cortical depression, cortical hyperexcitability, and activation of brain stem nuclei.

The involvement of the trigeminovascular system includes neuropeptide release, which causes painful inflammation of the dura matter and cranial vessels.

In simpler terms, under the unifying theory, all theories are considered. Depolarizing, neural, serotonin, and vascular theories come together to cause migraines. Stress triggers changes in the brain. These changes cause the release of serotonin. Blood vessels constrict and dilate. Chemicals like substance P irritate blood vessels and nerves causing inflammation and pain.

Risk Factors for Migraines

There are several risk factors, which make a person prone to experiencing migraines. They include:

- Age
- Family history
- Female
- Hormonal changes
- Medical conditions

Age

Being younger than 40 years of age is a risk factor. Approximately half of those with migraines started having them before they were 20. Migraine is most common in people who are between the ages of 30 and 39.

Family History

Having a family history of migraine is a risk factor. Many people with migraines have a family history of the disease. If your massage client has one or both parents who have migraines, chances are that they will have them too.

Female

Being female is yet another risk factor for migraine attacks. Data shows women are three times more likely to have migraines as men are. Generally, headaches tend to affect boys more than girls in childhood. Yet by the time of puberty, more girls are affected with headaches than boys.

Hormonal Changes

Another risk factor for migraine is experiencing hormonal changes. If you ask most of your massage clients who have migraines, you'll find they have episodes just before or shortly after onset of menstruation. Women also report changes in their migraine patterns during pregnancy and menopause.

Some find their migraines worsen in the first trimester of pregnancy. Fortunately, many find the migraines improve in the second and third trimesters of pregnancy.

Medical Conditions

A few medical conditions are risk factors for migraine. Research has shown that people with epilepsy and celiac disease are more likely to have migraine headaches than people who don't have these medical conditions.

Migraine Prevention

Preventing migraines is the key to migraine management. Preventive treatment, also called prophylactic treatment, takes many forms. These include certain prevention medications, nutritional supplements, regular exercise, regular massage therapy treatments, reducing the effects of estrogen, and avoidance of migraine triggers. With lifestyle changes, people with migraines may reduce the number and severity of migraines.

The goal of preventive treatment is to reduce the frequency, painfulness, and/or duration of migraines. Another aim of this treatment is to increase the efficacy of abortive therapy. A third reason prophylactic therapy is important is to avoid medication overuse headaches (MOH), also called rebound headaches.

Rebound headaches are a common problem among those with migraines. They are believed to occur due to overuse of pain medications. They often result in a chronic daily headache.

Many of the preventive treatments are very effective. About 25% or more of patients find their migraines reduced by half. Many drugs exist to prevent or reduce the frequency, duration, and severity of migraine episodes. They also limit migraine complications. Some of these medications need to be taken for 3 months or more before benefits are seen. These common medications include but are not limited to:

- Atenolol
- Flunarizine
- Metoprolol
- Nortriptyline
- Propranolol
- Sodium valproate
- Topiramate

People with migraines are always encouraged to keep a headache/migraine calendar when on preventative medications. This helps establish effectiveness of the therapy.

Trigger Avoidance and Lifestyle Choices

Critical to a migraine prevention program is the avoidance of migraine triggers. Encourage your massage clients with migraines to identify and avoid factors that precipitate migraine attacks. Eliminating particular foods known to trigger migraines is important.

If scents were a problem, they should be avoided, especially in massage treatment sessions. Using alcohol and caffeine in moderation or not at all is helpful. Regular meal times and consistent sleeping patterns are vital for those with migraines. In addition to all of these things, reduce and control stress.

Regular Exercise

Many doctors agree that regular aerobic exercise reduces tension and helps to prevent migraines. Massage clients should choose an exercise they enjoy like walking, swimming, or cycling, and set up a regular exercise schedule. Have them warm up slowly as sudden intense exercise can cause headaches. Obesity is thought to be a factor in migraine episodes, so regular exercise addresses this and helps keep people at a healthy weight.

Reduce the Effects of Estrogen

Women with migraines who feel estrogen triggers their migraines may want to avoid or reduce estrogen-containing medications. These medications include birth control pills and hormone replacement therapy. Encourage your female massage clients to speak with their healthcare provider about dosages and possible alternatives.

Gluten Free Diet

Those with celiac disease or gluten intolerances don't process gluten well. It is estimated that 4% of people with migraines have celiac disease or gluten intolerance. For these individuals, decreasing gluten significantly reduces migraine frequency and is critical in their prevention program.

Celiac disease and gluten sensitivity are a possible cause of migraines in some. Research shows that a gluten free diet reduces if not completely eliminates migraines in these people. Other studies have shown individuals with migraines are more likely than the general population to have celiac disease. For people with migraines and celiac disease, a gluten free diet improves blood flow to the brain and eliminates/reduces migraine frequency duration, and intensity.

Prescription Drugs

Some massage clients who have migraines might want to consider prescription medications to prevent them. Encourage them to be evaluated by their physician for preventive therapy medications. Physicians have standard guidelines to use and will prescribe drugs based on the following:

- Cost
- Failure of, contraindications for, or adverse events from acute migraine treatments
- Occurrence of two or more migraines per month with disability lasting three or more days per month
- Patient preference
- Uncommon migraine conditions
- Use of abortive medications more than twice per week

A neurologist usually supervises this type of therapy. The medications are taken on a daily basis for a few weeks before results are seen. Many drug options are available. Drug selection for any patient is a matter of trial and error since the effectiveness of each drug varies from person to person. They are not taken indefinitely and can be discontinued in some cases after six months of preventive therapy. Some of the drugs prescribed include:

- Anticonvulsants
- Aspirin
- Beta blockers
- Calcium antagonists
- Neurostabilizers
- Nonsteroidal anti-inflammatory drugs (NSAIDs)
- Selective serotonin reuptake inhibitors
- Tricyclic antidepressants

Often the drugs prescribed depend on the patient's medical history. For instance, those with heart problems and migraines are likely to get a beta blocker or aspirin. Those with depression and migraines are likely to get some type of antidepressant. Keep in mind that these medications may have side effects not well tolerated.

Herbal and Nutritional Supplements

Herbs may be helpful with migraine attacks. Butterbur or petasite hybridus rhizome extract has been shown to help. Cannabis is reported to help migraine attacks by relieving nausea, dulling head pain, and possible headache prevention when used during the prodrome phase or aura phase. Feverfew or tanacetum parthenium may reduce the frequency of migraines and help to abort them.

Coenzyme Q10 can be used to reduce the number of days with migraines. Magnesium sulfate greatly reduces the frequency of migraines as well. Omega-3 fatty acids may help control frequency and intensity. Riboflavin has been studied and shown to reduce the number of migraines. Vitamin B₁₂ taken daily may be helpful to prevent migraines and reduce the frequency of attacks by 50% or more. Melatonin also shows promising results in the literature for those with migraines.

Surgical Prevention

For the prevention of chronic migraines, botulinum neurotoxin (Botox) injections have been used although they are controversial. The Botox paralyzes the facial muscles. The injections do not work for episodic migraines. Another preventative surgical treatment is to remove specific muscles in the area of one or more identified trigger points. A final preventative surgical treatment is to transect specific cranial nerve branches near these trigger points.

Behavioral Prevention

Behavioral prevention of migraine can include 15-20 minutes of daily exercise, sleep, diet, visualization, self-hypnosis, sexual activity, vision corrective eyeglasses, and even letting the migraine "run its course" by not using painkillers.

Alternative Medicine Prevention

Bodywork, massage therapy, myofascial release, acupressure, acupuncture, physical therapy, magnetic stimulation, biofeedback, hyperbaric oxygen therapy, chiropractic care, and Bowen technique can be used to help prevent of migraines.

Diagnosis of Migraine

Typically, most clinicians diagnose patients with a process called differential diagnosis. In the process of differential diagnosis, the clinician considers all plausible diagnoses based on the patient's symptoms, sex, age, medical history, and other factors. They narrow down the diagnosis to the most probable one.

Migraines are diagnosed by a physician, physician's assistant, or nurse practitioner. Usually they diagnose migraines based on medical history, clinical symptoms, physical examination, and routine laboratory tests.

During the physical examination, a thorough neurologic examination is done. Red flag findings in the exam include:

- Altered mental status
- Changes in an established headache pattern
- Fever
- Headaches that increase in intensity or frequency for weeks or longer
- History of cancer (brain metastases)
- History of immunosuppressive disorder like HIV infection or AIDS
- Meningismus – neck stiffness, photophobia, and headache
- Onset of headache after age 50
- Papilledema – optic disc swelling caused by increased intracranial pressure
- Persistent focal neurologic deficits
- Thunderclap headache – pain that reaches peak intensity within a few seconds or less

Those with characteristic migraine symptoms and no red flag findings don't require additional testing. If your massage client has a history of migraines or a family history of migraines, it is likely the healthcare provider will diagnose migraines based on medical history and physical examination only.

Those with these red flag findings often require brain imaging studies and possible spinal tap. If your massage client has severe, sudden, or unusual headaches, a variety of tests will be done to rule out other possible conditions.

Possible tests used may include computerized tomography or CT imaging scans, magnetic resonance imaging or MRI, and a spinal tap or lumbar puncture. CT scans rule out tumors, infections, and other medical problems that may cause severe headaches. MRIs rule out tumors, aneurysms, neurological diseases, strokes, and other brain abnormalities. A spinal tap rules out serious infections like meningitis.

Mistakes in diagnosis can be made. It is important your massage clients see a qualified healthcare professional for diagnosis. Common diagnostic errors include:

- Assuming headaches in patients with a history of migraine are another migraine attack
- Diagnosing migraines as eyestrain
- Diagnosing migraines as sinus headaches
- Mistaking a migraine with aura for a transient ischemic attack (TIA) especially in cases with the elderly when the aura occurs without a headache
- Not realizing a thunderclap headache or a change in the previous headache pattern may indicate a new potentially serious disorder
- Not realizing migraine is not always described as throbbing
- Not realizing migraine often causes bilateral pain

Treatment of Migraines

There are many treatment approaches to migraine headaches. The main approaches discussed in this course include lifestyle and home remedies, alternative medicine, and prescription medications.

Lifestyle and Home Remedies

For many people, an initial treatment to control a migraine attack involves lying down in a dark, quiet room free of sensory stimulation. There are many other self care measures used to help migraine pain. Encourage your massage clients to try any of the following:

- Avoid over sleeping

- Doing something relaxing like gardening, reading, or taking a hot bath
- Gentle pressure to painful areas on scalp
- Get enough sleep (average 6 to 8 hours for adults)
- Go to bed and wake up at regular times
- Ice pack wrapped in cloth at back of neck
- Keep a headache diary with triggers and treatments
- Meditation
- Muscle relaxation exercises using books or tapes
- Rest and relax in a dark quiet room when migraine is coming on
- Yoga

Alternative Medicine

Complementary and alternative medicine is helpful for chronic migraine pain. Encourage your massage clients to try any of the following:

- Acupressure – pressure applied with fingers to specific points on the body
- Acupuncture – insertion of fine needles into specific points on the body
- Biofeedback – relaxation technique using equipment to monitor and control physical responses like muscle tension to stress
- Herbs – like feverfew, butterbur (check with doctor if pregnant)
- Massage therapy – discussed in depth in the upcoming sections
- Minerals – coenzyme Q10, magnesium sulfate
- Vitamins – riboflavin (B2)

Medications

Mainstream medicine encourages the use of drugs and medications to treat migraines. Many drugs have been created to specifically treat migraines. Other drugs used to treat other common conditions have been found to help relieve or prevent migraines. Either way, medications used to treat migraines fall into two categories:

- Preventive Medications
- Pain Relieving Medications

Choosing a medication strategy to manage migraines depends on the severity of the headaches, frequency of the headaches, the degree of disability the headaches cause, and other medical conditions. Encourage your massage clients to check with their doctors as some drugs aren't recommended during pregnancy, breastfeeding, or for use in children.

Preventive Medications

Preventive medications are usually taken on a daily basis to decrease the severity and frequency of migraine attacks. Occasionally people take preventive medications around a predictable trigger like menstruation. Some experts feel that half of those who get migraines could be helped by preventative medications. Despite this only 1 in 10 people take them. Candidates for preventive therapy include:

- Cases where pain relieving medications don't help
- Those with numbness and weakness
- Those with prolonged aura
- Those with two or more debilitating attacks a month

In addition to decreasing the severity, frequency, and length of migraine attacks, preventive medications increase the effectiveness of pain/symptom relieving drugs used during episodes. Unfortunately, preventive medications don't stop the headache completely. Some medications cause serious side effects.

If a person has good results with a certain drug and is migraine free for 6 or more months, their physician may taper them off the medication to see if the migraine attacks reoccur without the drug. In all cases, it is best to take the medications as prescribed.

Pain Relieving Medications

Pain relieving medications are also known as acute or abortive treatment. Your massage clients should always take their pain relieving medications as soon as signs or symptoms of their migraine start. Encourage them to rest or sleep in a dark room after taking them. They are taken during migraine attacks and designed to stop symptoms that have already begun.

Medications, like pain relievers, prescribed to prevent migraine and used heavily over a period of time can cause medication overuse headaches. Other problems may exist for those with gastrointestinal problems, cardiovascular disease, pregnancy, or breastfeeding. They are often unable to tolerate the medications.

Here is a list and a description of drugs commonly prescribed in both preventive therapy and pain relieving therapy:

- *Antidepressants* – A few of the antidepressants, like the tricyclic antidepressants, are helpful in preventing some migraines. They affect the levels of serotonin and other neurotransmitters in the brain. These medications are considered first line treatment agents. A person with migraines does not have to have depression to benefit from these medications.
- *Anti-nausea medications* – Since nausea and vomiting often occur with migraine episodes, anti-nausea drugs are helpful to use. They are often combined with other medications.
- *Anti-seizure medications* – Several anti-seizure drugs appear to reduce the frequency of migraines. They should be used with caution since in high doses the side effects include nausea, vomiting, diarrhea, cramps, and dizziness.
- *Botulinum toxin type A (Botox)* – Botox is occasionally used for the treatment of chronic migraines. While the research is inconclusive as to the effectiveness of this practice, some migraine specialists believe it is helpful for some. Injections are given in the muscles of the forehead and neck. They need to be repeated every three months.
- *Butalbital combinations* – Drugs combining the sedative butalbital with aspirin or acetaminophen are used to treat migraines. Caffeine is also combined in these medications. They have a high risk of rebound headache and withdrawal symptoms. These are a last resort option and must be used infrequently.
- *Cardiovascular medications* – Several drugs in this category work in migraine treatment. Beta blockers reduce the frequency and severity of migraines while treating high blood pressure and coronary artery disease. These are considered first line treatment agents. Calcium channel blockers help prevent migraines and relieve aura symptoms. Antihypertensive medications reduce the length and severity of migraines. Research does not understand why cardiovascular medications prevent migraines. Side effects include lightheadedness, dizziness, or drowsiness.
- *Cyproheptadine* – Cyproheptadine is an antihistamine which affects serotonin levels. It is used for children with migraines as a preventive measure.
- *Ergot* – Ergot is effective for those migraine patients whose pain lasts for more than 48 hours. Encourage your massage clients to check with their doctor as some ergot derivatives have fewer side effects than others.
- *Nonsteroidal anti-inflammatory drugs* – If migraines are mild or moderate, medications like ibuprofen or aspirin may help. They aren't effective alone for severe migraines. Prolonged use of NSAIDs cause ulcers, gastrointestinal bleeding, and rebound headaches.

- *Opiates* – Opiates are narcotics and include drugs like codeine. They are sometimes used to treat migraine pain when people can't use other options. Narcotics are habit forming and are used in migraine treatment as a last resort.
- *Triptans* – Used for severe migraine episodes, triptans are the drug of choice for many. They relieve nausea, pain, sensitivity to light, and sensitivity to sound associated with migraines. Side effects include nausea, muscle weakness, and dizziness. Triptans are not recommended for those at risk for strokes and heart attacks.

Overall, migraines can't be cured with any of these treatment strategies, but rather controlled. Encourage your massage clients to journal the number and timing of their attacks, triggers, and response to treatments used. Their treatment programs will be based on the frequency, duration, and severity of their attacks as well as their response to treatment.

Prognosis for People with Migraines

The prognosis for those with migraine is variable. For some, migraine is an infrequent but tolerable inconvenience. For others, it is a debilitating disorder which severely impairs their quality of life and results in frequent loss of productivity and periods of incapacity.

Complications may arise from trying to control or treat the pain. Abdominal problems like pain, ulcers, or bleeding may be caused by NSAIDs if taken for prolonged periods of time in large doses. Rebound headaches are another complication that occurs when medications stop relieving the pain and begin to cause headaches. Serotonin syndrome is a rare life threatening drug complication occurring when triptans are combined with the selective serotonin reuptake inhibitor (SSRIs) antidepressants.

Massage Therapy and Migraines

Massage therapy is becoming more popular for treatment of migraines. Research is being done to validate what massage therapists see clinically in their practice: massage works for migraines. The goal of massage therapy treatment in migraines is to increase relaxation and decrease pain.

Massage helps relieve migraine pain by relaxing muscles, reducing stress, lowering blood pressure, improving blood flow, and improving sleep. Additionally, massage therapy provides long-term benefits for those with migraines even after the treatments.

According to the American Massage Therapy Association (AMTA), studies have been published showing that those with migraines who receive massage treatments have fewer attacks and sleep better than those who don't receive massage treatments. The AMTA also reports massage therapy decreases migraine headaches, sleep problems, and other migraine symptoms in adults.

Researchers in Australia found weekly massage treatments reduced migraines, improved sleep, reduced stress and anxiety, lowered levels of cortisol, and lowered heart rate. They also found evidence that massage reduced the incidence of migraines after treatment has ended. Findings like these strongly support the use of massage therapy as a non-pharmacologic treatment for those troubled by migraines.

Types of Massage Used with Migraines

There are many types of professional massage therapy to use for your clients with migraines. Some types of massage used with migraine clients have already been listed and discussed. For summary and review they are listed again here. They include but are not limited to the following:

- Acupressure or shiatsu

- Cold hydrotherapy to head and neck
- Craniosacral therapy
- Deep tissue massage
- Essential oil massage
- Hand and foot massage
- Manual lymph drainage
- Myofascial release massage
- Neuromuscular therapy
- Proprioceptive neuromuscular facilitation (PNF)
- Reflexology
- Release sub-occipital muscles
- Rolfing
- Swedish massage
- Trigger point therapy

Professional massage therapists trained in any of these modalities help the migraine client get relief from their headaches. Therapists can also educate their migraine clients about the benefits of at-home self-massage in between professional massage therapy sessions.

When your migraine massage clients visit your office for a professional massage, instruct them about self-massage at home. Start by teaching them some basic acupressure or shiatsu points to stimulate between sessions. You may teach them something like the following:

- Massage certain pressure points on your forehead, temples, neck, hands, and feet to get migraine relief
- Place your thumb and first two fingers on the pressure point
- Apply light to moderate pressure
- Press until you feel a lump or tension in the pressure point
- Allow your thumb and fingers to sink deeper into the point
- Massage with small circular motions
- If the pain is too great, reduce the pressure
- Keep your thumb and fingers on the pressure point until you feel a release, relaxation, softness, or feeling of warmth at the point
- Slowly release the pressure
- Lift your fingers from the pressure point
- Repeat as needed, usually 5 to 10 times at each point
- Use the above steps on the following pressure points:
 - Base of the skull – bony base of skull on back side
 - Mid-forehead – middle of forehead between the eyebrows
 - Eye corners – massage temples or spots behind your eyes just behind the bone
 - Hands – the fleshy area between your thumb and index finger
 - Feet – top of foot between the big and second toes where the bones come together

Whether the migraine sufferer uses a professional massage therapist or self-massage techniques taught to them by a licensed massage therapist, massage provides migraine pain relief. It is a valuable option for those who don't tolerate or desire prescription medications. It is also a valuable adjunct therapy for those using medications. Massage therapy can be safely combined with prescription medications for migraine control.

Massage to Relieve Migraine Headaches

Massage is commonly being used by professional therapists and lay people to relieve acute migraine headaches. Light massage combined with a few migraine pressure points gives the best relief.

A pressure point is a point on the body that decreases pain when pressure is applied. Migraine pressure points are points on the body, which provide migraine pain relief. These points are pressed and released slowly and rhythmically. Direct massage can also be used on the point for pain relief.

Migraine Pressure Point Technique

For each migraine pressure point, the same simple steps are used by the massage therapist. First, use the pads of the thumbs or the first two fingers. Avoid using the tips or ends of the thumbs and fingers.

Keep the pressure light to moderate, depending on the client's reaction to pressure and how sensitive the point is to touch. Press hard enough so tension or hardness is felt under the thumb and fingers. If a migraine pressure point is too tender for the client, apply less pressure.

The therapist's fingers sink into the point as pressure is applied gradually. The therapist feels the thumb or fingers sinking gradually deeper and deeper into the tissues of the client. When the thumb or finger is as deep as needed, massage the point with small circular motions.

Stay on the migraine pressure point with the thumb or finger until a release, change, or movement is felt. The point may feel warmer or softer. This may be anywhere from 30 seconds to a couple of minutes depending on the client. Gradually and slowly lift the thumb and fingers off the skin as you release the point. Repeat as needed or several times at the same point.

Remember to be firm yet gentle with the pressure. Too much pressure causes tension in the surrounding muscles and too little pressure is ineffective and does not bring pain relief. Also remember, your massage clients will respond differently to these pressure points. Be prepared to individualize the treatment plan.

Essentially, these migraine pressure points are acupressure or shiatsu points. For those who don't want to or aren't able to take medications to relieve their migraine pain, acupressure therapy or shiatsu is a great alternative. For more massage therapy continuing education hours on the subject of acupressure, please see our *Acupressure Basics* or *Shiatsu Therapy* online home study courses.

Migraine Pressure Point Locations

Here is a simple protocol of point locations for massage therapists to use with clients during a massage session and to teach them to use at home when experiencing an acute migraine attack:

- Occiput, Base of Skull, or Gall Bladder (GB) 20
- Trapezius Muscle Crest or GB 21
- Mid-Forehead, Glabella, or Yin Tang
- Eye Corners, Lateral Temples, or Tai Yang
- Hand Dorsum in Fleshy Mound or Large Intestine (LI) 4
- Foot or Liver (LR) 3

Each of these migraine pressure points is a set of two points located on either side of the body. For example, GB 20 has two locations, one on the left side of the occiput and one on the right side of the occiput.

Occiput/Base of Skull/GB 20

The anatomical location of this migraine pressure point is at the base of the skull about 1 inch from your spinal column on either side. It is located below the occipital bone between the origins of the sternocleidomastoid and trapezius muscles.

To use this pressure point, hold the thumbs against the two points. Press upward gradually while instructing the client to breathe deeply. Once you reach the deepest point in the muscle, massage it with tiny circular motions of the thumb while maintaining pressure. Once you feel the point release or a change in the point is felt, slowly release pressure and repeat this 5-10 times.

Trapezius Muscle Crest/GB 21

The anatomical location of this migraine pressure point is at the crest of the trapezius muscle, halfway between the tip of the acromion and the spine.

To use this point, hold the thumbs or first two fingers on the point. Press inward gradually while instructing the client to breathe deeply. You can also stimulate this point by squeezing or pinching it gradually between your thumb pad and index finger. When you reach the deepest point, massage with small circular motions while maintaining pressure. Once a change is felt in the point, release the pressure slowly. Repeat this process 5-10 times.

Mid-Forehead/Glabella/Yin Tang

The anatomical location of this migraine pressure point is at the middle point of the medial ends of the eyebrows.

To use this point, hold your thumb or one of the first two fingers on the point. Press inward gradually and instructing the client to breathe deeply. When you reach the deepest point, massage it with tiny circular motions while maintaining pressure. Once a change is felt in the point, release the pressure slowly. Repeat this process 5-10 times.

Eye Corners/Lateral Temples/Tai Yang

The anatomical location of this migraine pressure point is on the temples. It is the tender spot posterior to middle point of lateral end of eyebrow and outer canthus of eye.

To use this point, feel the face at the outer corners of the client's eyes. Move your fingers until you find the tender spot just behind the bone. Using one or two finger pads, apply pressure inward gradually. Instruct the client to breathe deeply as you do so. Once the deepest point is reached, massage it with small circular motions while continuing to hold pressure. As you feel a change in the point, release the pressure slowly. Repeat this process 5-10 times.

Hands/LI 4

The anatomical location of this migraine pressure point is on the dorsum of the hand between 1st and 2nd metacarpal bones. It is at midpoint of 2nd metacarpal and at highest point of the fleshy mound. It is one of the most effective points for relieving headache and migraine pain.

To use this point, use the thumb pad and index finger to gradually squeeze the point. Instruct your client to breathe deeply as you increase pressure. When you have reached the deepest point, massage with tiny circular motions while maintaining pressure. Once a change is felt in the point, slowly release the pressure. Repeat this process 5-10 times.

Feet/LR 3

The anatomical location of this migraine pressure point is in the depression distal to the junction of the 1st and 2nd metatarsal bones. This is the last point in the protocol to massage migraine headaches away.

To use this point, use the thumb or finger pads. Press downward on the point gradually. Instruct the client to breathe deeply. When the deepest point is reached, massage with tiny circular motions while maintaining pressure. Once a change is felt in the point, slowly release the pressure. Repeat this process 5-10 times.

Contraindications for Massage Therapy with Migraine Clients

Many of the contraindications for massage therapy with migraine clients are client dependent. Some of your clients with migraines will tolerate these things and others will not. Depending on your client's symptoms, massage may be contraindicated during an acute migraine attack. For example, if a person's migraine is worse with pressure, massage pressure would be contraindicated in that case.

Depending on the client's preference, heat therapies, deep work, or other things causing vasodilation may be contraindicated. Music, bright lights, and fragrance are other possible contraindications depending on the person's migraine triggers. Migraine clients may not tolerate the prone position and it may be a contraindication for your client.

Generally, during acute flare-ups of rheumatoid arthritis (RA), people should not receive massage therapy. If your client has RA in addition to migraines, check with the client about any acute RA flare ups before the session begins. Massage therapy is also contraindicated in those with skin lesions like eczema, so again, ask the client about this prior to the massage session.

Other general contraindications for massage therapy with migraine clients might include those who have cancer. It is not an absolute contraindication; it is just that the patient and/or massage therapist should check with the oncologist before considering massage. Direct massage on a primary or secondary tumor site can further damage tissue already subjected to chemotherapy or radiation treatments.

Other situations a migraine client might want to avoid massage would be in osteoporosis, high fever, low white blood cells, low blood platelets, mental impairment, or recovery from certain types of surgery.

Another general caution with massage and migraines would be on women receiving full body massages during pregnancy. Pregnant women should always consult a therapist specifically trained to perform massages on pregnant women.

Additionally, as the massage therapist, ask about any medications the client is taking. Massage may influence the absorption or activity of both oral and topical medications. A good history and intake form takes care of this issue. For more information about how medications are affected by massage, see our *Massage and Pharmacology* online home study course.

Generally, massage is considered safe for most people including those with migraines. Pain or other rare negative side effects are usually only caused by an extremely vigorous massage. Overall, massage therapy is a safe, valuable, and effective for people with migraines.

When to Refer Migraine Clients

It may be necessary to refer a client with migraine. For example, a massage therapist with lack of proper massage training to treat the client's symptoms would be an appropriate referral. The people to refer to include professional massage therapists with proper migraine treatment training, primary care providers, neurologists, or other doctors who specialize in headache medicine.

Migraines are often undiagnosed and untreated. If your massage client is experiencing signs and symptoms of migraine, have them keep a record of the attacks and how they treat them. Refer them to a healthcare provider or other specialist to discuss the headaches and find a treatment plan. If they have a history of headaches, they should especially see their healthcare provider if the headache pattern changes or suddenly feels different.

It is always appropriate to refer a migraine client anytime the massage therapist feels they are not making progress with the person. Additionally, if symptoms become worse, refer the client to their physician immediately.

Massage clients should immediately see their doctor or go to the emergency room if they have any of the following signs and symptoms as these things could possibly indicate another more serious medical problem:

- A chronic headache worse after coughing, exertion, sudden movement, or straining
- Abrupt severe headache like a thunderclap
- Headache after a head injury, especially if the headache increases in severity
- Headache with fever, mental confusion, seizures, stiff neck, rash, weakness, double vision, numbness, or trouble speaking
- New headache pain if they are over age 50

Once a massage therapist has decided to refer their client to a primary care provider, neurologist, or other doctor specializing in headache medicine, help them prepare for the appointment. Visits are brief and there is a lot of ground to cover. This also helps them know what to expect. Here are some suggestions to offer clients to prepare for their appointment with their doctor:

- Make a list of all medications, vitamins, and supplements taken including those used to treat headaches and the dosages
- Make a list of questions, listing from most important to least important in case time runs out
- Take a family member or friend to the visit as there will be a lot of information to soak up and they may hear or remember something forgotten or missed
- Write down key personal information including major life changes or stresses
- Write down questions for the doctor as time is limited and this helps make the most of the time
- Write down symptoms experienced even if they seem unrelated to the migraines

Sample questions to ask the physician may include:

- Ask any questions when you don't understand something covered
- What is triggering my migraines?
- What are other possible causes for my symptoms?
- What tests are needed?
- Is this likely to be temporary or chronic?
- What is the best course of action?
- What are the alternatives to the approach you suggest?
- What lifestyle changes do you suggest?
- How do I best manage this with my other health conditions?
- What websites, brochures, or other material do you recommend?

Prepare your massage client by letting them know what the doctor will ask them. Here are some potential questions the physician may cover:

- When did your symptoms first start?
- Are the symptoms occasional or constant?
- How severe are the symptoms?
- Does anything improve the symptoms?
- Does anything worsen the symptoms?

Additionally, encourage your massage client to get ready for the appointment by doing the following:

- Keep a headache diary: note how they feel or what they are doing when a headache starts, how long it lasts, medications taken, response to medications or other treatment, anything that provides relief, foods eaten in the 24 hours preceding attacks, stress level, and anything else that seems important

- Reduce stress as it triggers migraines for many by using stress reduction techniques like mediation or yoga
- Get enough sleep aiming for 6 to 8 hours of sleep per night

With these suggestions, your massage clients with migraine will be well prepared for their referral. Once they begin treatment with a doctor or other health care provider, work in partnership with that provider. Let them know the massage treatments you use for the client. Ask for any special recommendations they have.

Migraine Resources

For more information, people with migraines can visit the any of the following organization's websites:

- American Migraine Foundation <https://americanmigrainefoundation.org>
- American Pain Foundation <http://www.painfoundation.org>
- Migraine Research Foundation <http://migraineresearchfoundation.org>
- National Headache Foundation <http://www.headaches.org>
- National Institute of Neurological Disorders and Stroke <https://www.ninds.nih.gov/Disorders/All-Disorders/Migraine-Information-Page>

For more continuing education hours on the subject of migraine and headaches, see our *Massage for Headaches and Neck Pain* home study course.

For a free printable handout for massage clients with migraines, visit <https://catalog.ninds.nih.gov/pubstatic//16-158-Z/16-158-Z.pdf>.

Migraine Prevention for Massage Therapists

For professional massage therapists who suffer with migraine or therapists concerned about migraine, lifestyle changes can prevent the number and severity of attacks as well as help reduce them. Some suggestions for prevention have been listed throughout the text, but here they are again for review:

- Aerobic exercise like swimming, walking, and cycling daily reduces tension and decreases weight which are both things thought to be factors in migraine attacks
- Avoid migraine triggers like foods, scents, stress, or anything else that has triggered the migraine in the past
- Establish regular meal times eating at the same times each day
- Establish regular sleep routines and patterns going to bed at the same time each night and awaking at the same time each morning
- Limit the amount of medications containing estrogen like birth control pills and hormone replacement therapy taken
- Warm up slowly when exercising

When speaking about prevention, a few words about medications must be brought up again. Most experts agree daily medication therapy and acute treatment is indicated when migraines are frequent and interfere with activity. For people with medication overuse headaches from frequent analgesic use, preventive drugs should be combined with a program of massage therapy and other modalities to stop the overused analgesics.

As more is discovered about migraines, more recommendations for prevention will be available to massage therapists concerned about the problem. If you experience signs or symptoms of migraine like those listed earlier in this text, consult your own personal primary care physician immediately.

Early and correct diagnosis of the problem is critical for the best outcome in all cases. Don't wait for the symptoms to go away. Get checked out early. As a professional licensed massage therapist, your body is your livelihood.

References

E-zine Articles <http://ezinearticles.com/?How-to-Massage-Migraine-Headaches&id=447903>

Mayo Clinic <http://www.mayoclinic.org/diseases-conditions/migraine-headache/home/ovc-20242432>

Medline Plus <http://www.nlm.nih.gov/medlineplus/migraine.html>

Merck Manual Online <http://www.merckmanuals.com/professional/sec16/ch216/ch216d.html>

National Migraine Association <http://www.migraines.org/>

WebMD <http://www.webmd.com/migraines-headaches/default.htm>

Massage and Migraines Exam

1. Migraine is a:
 - A. Neurological syndrome
 - B. Neurological disease
 - C. Neurological symptom
 - D. None of the above

2. Migraine is a:
 - A. Primary headache disorder
 - B. Secondary headache disorder
 - C. Tertiary headache disorder
 - D. None of the above

3. The typical migraine is:
 - A. Unilateral
 - B. Excruciatingly painful
 - C. Throbbing
 - D. All of the above

4. Migraines affect how many people at some point in their life?
 - A. 10 – 15%
 - B. 18 – 38%
 - C. 12 – 28%
 - D. 38 – 48%

5. Migraine signs and symptoms are likely to include all but which of the following?
 - A. Sensitivity to light
 - B. Sensitivity to sound
 - C. Sensitivity to animals
 - D. Sensitivity to odors

6. The prodrome phase occurs:
 - A. Immediately before the headache
 - B. Hours or days before the headache
 - C. After the headache
 - D. During the headache

7. An aura is:
 - A. A neurological phenomena preceding or accompanying a migraine
 - B. A gastrointestinal phenomena preceding or accompanying a migraine
 - C. A cardiovascular phenomena preceding or accompanying a migraine
 - D. A genitourinary phenomena preceding or accompanying a migraine

8. Which of the following are other names for a silent migraine?
 - A. Acephalgic migraine
 - B. Amigrainous migraine
 - C. Isolated visual migraine
 - D. All of the above

9. Possible visual symptoms of a migraine aura include which of the following?
- A. Perception of zigzag lines
 - B. Perception of additional structure
 - C. Blurred vision
 - D. All of the above
10. The pain phase of a migraine lasts how long in adults?
- A. 4-72 minutes
 - B. 4-72 hours
 - C. 4-72 days
 - D. 4-74 years
11. The average person with migraines has how many attacks per month?
- A. 0-2
 - B. 1-2
 - C. 1-3
 - D. 3-4
12. Symptoms of the pain phase include all of the following except:
- A. Constipation
 - B. Diarrhea
 - C. Poor concentration
 - D. Vertigo
13. Migraine triggers may include:
- A. Anxiety
 - B. Bright lights
 - C. Dehydration
 - D. All of the above
14. Other migraine triggers may include:
- A. Gluten
 - B. Hormonal changes
 - C. Stress at home or work
 - D. All of the above
15. Patients identify migraine triggers by:
- A. Keeping a regular work schedule
 - B. Keeping a migraine journal
 - C. Ignoring signs and symptoms
 - D. Ignoring family and friends
16. Possible migraine dietary triggers include all of the following except:
- A. Gluten
 - B. MSG
 - C. Orange juice
 - D. Tyramine

17. Most information about dietary triggers comes from:
- A. Subjective assessments of patients
 - B. Objective assessments of patients
 - C. Impaired memory
 - D. Impaired short term memory
18. Weather migraine triggers can include all of the following except:
- A. Changes in barometric pressure
 - B. Significant weather changes
 - C. Temperature changes with humidity
 - D. Bright sunny days
19. Depolarization theory refers to:
- A. Bloating
 - B. Diarrhea
 - C. An electrical change in the brain
 - D. An emotional change in the brain
20. Neural theory involves:
- A. Substance Q
 - B. Substance P
 - C. Substance V
 - D. Substance X
21. Serotonin theory suggests serotonin levels:
- A. Increase during migraine
 - B. Drop during migraine
 - C. Stay the same during migraine
 - D. None of the above
22. Vascular theory is:
- A. Considered secondary to other theories
 - B. Considered the prime migraine causation theory
 - C. Neurotransmitter dysregulation
 - D. All of the above
23. Unifying theory of migraine pathophysiology states migraine:
- A. Is a pain syndrome
 - B. Involves neurons
 - C. Involves blood vessels
 - D. All of the above
24. Risk factors for migraines include all of the following except:
- A. Age
 - B. Family history
 - C. Hormonal changes
 - D. Skin color

25. Medical conditions associated with migraine include:
- A. Epilepsy and celiac disease
 - B. Rheumatic disease and fibromyalgia
 - C. Heart disease and carpal tunnel syndrome
 - D. All of the above
26. MOH stands for:
- A. Medication overuse headache
 - B. Mainly occipital headache
 - C. Mostly old headache
 - D. Medical origin headache
27. Rebound headaches are believed to occur due to:
- A. Diabetes
 - B. Disturbed sleep
 - C. Overuse of pain medications
 - D. Genetics
28. Lifestyle choices helpful in migraine prevention include:
- A. Poor sleep
 - B. Poor finances
 - C. Regular meal times
 - D. Stress
29. Recommendations for the prevention of migraine include:
- A. Regular meal times
 - B. Regular exercise
 - C. Consistent sleeping patterns
 - D. All of the above
30. What percent of people with migraine have celiac disease?
- A. 10%
 - B. 4%
 - C. 25%
 - D. 44%
31. Commonly prescribed migraine medications include:
- A. Anticoagulant
 - B. Antidepressants
 - C. Anesthetics
 - D. Sedatives
32. Behavioral prevention of migraine headaches includes:
- A. Daily exercise
 - B. Regular sleep
 - C. Letting the migraine “run its course”
 - D. All of the above

33. Red flag findings in the diagnosis of migraine include all of the following except:
- A. Elevated thyroid hormone levels
 - B. Altered mental status
 - C. Fever
 - D. Meningismus
34. A thunderclap headache is a headache where pain:
- A. Decreases in intensity
 - B. Reaches peak intensity within a few seconds or less
 - C. Reaches minimal intensity within a few seconds or less
 - D. None of the above
35. Lifestyle remedies for migraines include all the following except:
- A. Regular exercise
 - B. Regular sleep patterns
 - C. Decreasing stress
 - D. Watching late night movies
36. Which of the following minerals and vitamins may be included in a migraine treatment plan?
- A. Riboflavin
 - B. Coenzyme Q10
 - C. Magnesium sulfate
 - D. All of the above
37. Preventive medications are taken by how many people?
- A. 5 out of 10
 - B. 3 out of 10
 - C. 1 out of 10
 - D. 6 out of 10
38. Pain relieving medications are also known as:
- A. Chronic treatment
 - B. Alternative treatment
 - C. Supportive treatment
 - D. Abortive treatment
39. Anti-nausea medications are used in migraine treatment for:
- A. Depression
 - B. Nausea
 - C. Heart problems
 - D. Nose bleeds
40. Prolonged use of NSAIDs causes:
- A. Ulcers
 - B. Gastrointestinal bleeding
 - C. Rebound headaches
 - D. All of the above

41. Opiates are:
- A. Habit forming and a last resort
 - B. A first line migraine treatment
 - C. Helpful in all migraine cases
 - D. Never used in migraine treatment
42. The goal of massage therapy treatment in migraines is:
- A. To increase relaxation and decrease pain
 - B. To increase range of motion in joints
 - C. To increase production of endorphins
 - D. To diagnose migraine disorder
43. Massage modalities useful with migraine include:
- A. Acupressure
 - B. Deep tissue massage
 - C. Trigger point therapy
 - D. All of the above
44. When teaching your massage clients about self-massage at-home, instruct them to use which of the following?
- A. Light to moderate pressure
 - B. Heavy and deep pressure
 - C. No pressure at all
 - D. All of the above
45. Migraine pressure point technique suggests the therapist use what to apply pressure?
- A. Toes and feet
 - B. Thumb pads or fingers
 - C. Elbows and arms
 - D. Hands or forearms
46. GB 20 is located where?
- A. Below the temporal bone
 - B. Below the femur bone
 - C. Below the occipital bone
 - D. Below the patella tendon
47. Yin Tang is located:
- A. At the middle point of the medial ends of the eyebrows
 - B. At the base of the ears
 - C. At the temples
 - D. At the trapezius muscle crest
48. LI 4 is found where?
- A. On the dorsum of the hand
 - B. Between 1st and 2nd metacarpal bones
 - C. At the highest point of the fleshy mound
 - D. All of the above

49. LR 3 is found:
- A. In the depression proximal to the 1st and 2nd metatarsal bones
 - B. In the depression distal to the 1st and 2nd metatarsal bones
 - C. In the depression distal to the 3rd and 4th metatarsal bones
 - D. In the depression distal to the 2nd and 3rd metatarsal bones
50. Contraindications for massage therapy in migraine patients are:
- A. Client independent
 - B. Universal
 - C. Client dependent
 - D. There are no contraindications for massage with migraine
51. Appropriate professionals to refer clients to include:
- A. Primary care providers
 - B. Neurologists
 - C. Doctors who specialize in headache medicine
 - D. All of the above
52. It is always appropriate to refer a migraine client when:
- A. The therapist feels progress is not being made with the person
 - B. The therapist feels progress is being made with the person
 - C. The therapist is qualified to treat the client
 - D. None of the above
53. Physicians may ask patients which of the following in an office visit?
- A. When did symptoms start?
 - B. How severe are symptoms?
 - C. What makes symptoms better?
 - D. All of the above
54. A suspected migraine client can prepare for a physician office visit by:
- A. Keeping a work diary
 - B. Keeping a headache diary
 - C. Keeping a food diary
 - D. None of the above
55. For persons with migraine, it is recommend to get:
- A. 4-6 hours of sleep per night
 - B. 5-7 hours of sleep per night
 - C. 6-8 hours of sleep per night
 - D. 8-10 hours of sleep per night

This completes the *Massage and Migraines* exam.