What is migraine?

A migraine is a relatively common medical condition that can severely affect the quality of life of the sufferer and his or her family and friends. Almost 8% of Canadians over the age of 12 have been diagnosed with migraine, of which 75% are women and 25% are men. Migraine is most commonly experienced by both men and women between the ages of 25 and 39.

There are two different types of migraines: migraines without aura and migraines with aura.

A migraine without aura is a condition characterized by moderate to severe throbbing and unilateral pain. The pain is worsened by movement and accompanied by at least one of the following symptoms:

- Nausea, loss of appetite and/or vomiting
- Photophobia (increased sensitivity to light)
- Phonophobia (increased sensitivity to sound)

Migraines without aura are characterized by sudden onset and can have a major impact on the sufferer's daily life. On average, untreated migraine episodes last from 4 to 72 hours.

A migraine with aura involves any number of different sensations that range from visual disturbances to physical sensations. The aura symptoms usually occur in alternating body sites during different attacks. Almost always preceding the headache, the aura symptoms can last between 5 and 60 minutes. Some people report having a prodrome, a feeling of strangeness a day or two before the attack begins. Prodromes are characterized by mood changes, food cravings, feeling tired or hyperactive, or excessive yawning. Some people may also experience fatigue, stiffness in the neck and/or difficulty concentrating.

What causes migraine?

There are many theories that discuss the causes of migraine. The cortical spreading depression (CSD) theory suggests that migraine is a disease of the brain such as angina is a disease of the heart. Disruption of normal brain functioning is believed to be the underlying cause of the migraine pain and aura. Another theory is the vascular theory which suggests that migraines result from the widening of blood vessels surrounding the brain. The chemical serotonin is also thought to play an important role in migraine development. While the precise cause of migraines remains unknown, a number of potential migraine triggers (habits or conditions associated with the onset of a migraine) have been identified.

Each migraine sufferer has his or her individual triggers. Many migraines in women are triggered by hormonal changes such as those experienced during menstruation and pregnancy. Up to 50% of women can suffer from a migraine related to menstruation. Migraines tend to intensify during puberty and disappear during menopause.

Migraines can be triggered by:

- Diet (foods such as cheese, coffee, tea, alcoholic beverages or nuts)
- Strong odours such as perfumes
- Bright lights
- Loud noises
- Changes in the weather
- Stress
- Sleeping more or less than usual
- Certain medications
Are you suffering from migraines?

Although an estimated 2 million Canadians have been diagnosed with migraine, only 1 in every 12 migraine cases has been diagnosed. It is important to talk to your doctor if you believe that you suffer from migraines because this condition can be managed and treated. The International Headache Society has guidelines for both the diagnosis and management of migraine.

In migraine without aura, diagnosis includes:
- At least 5 attacks meeting the following criteria:
  - Untreated or unsuccessfully treated attack lasting 4 to 72 hours
  - The attack has at least 2 of the following characteristics:
    - Isolation of pain to one side of the head
    - Pain of a pulsating quality
  - Moderate to severe pain intensity
    - Severity of pain inhibiting or prohibiting daily activities
  - During at least 1 attack the following symptoms should be present:
    - Nausea and/or vomiting
    - Sensitivity to light, noise or odours

In migraine with aura, diagnosis includes:
- At least 2 attacks of aura symptoms
  - May include visual disturbances such as seeing spots or unusual colours
  - Lasting a minimum of 5 to 20 minutes and a maximum of 60 minutes
  - A headache with characteristics associated with a migraine without aura
    - Beginning during the aura or within 60 minutes following the aura

Managing your migraine

The first step in managing your migraines is to identify your triggers so that you can avoid them in the future. You may find it helpful to keep a migraine diary to track details of your attacks.

Immediately after an attack, ask yourself these questions:
- How severe was your migraine? 1 = mild  2 = moderate  3 = severe
- Was it accompanied by an aura?
- Did you experience any other symptoms? 1 = nausea  2 = light sensitivity  3 = sound sensitivity
- What medication(s) did you take?
  - Did they relieve your pain?
  - Did they allow you to return to daily activities?
- What do you suspect your migraine triggers are?

After every attack, write your answers in your migraine diary. Compare answers to see if a pattern emerges and identify your triggers.

If you are unable to remember all of the details leading up to your attack, ask friends or family for their recollections and add these to your migraine diary. Recording as many details as possible will help you identify your triggers much sooner.
**Treating your migraine**

Common non-prescription painkillers such as acetylsalicylic acid, acetaminophen and ibuprofen can be effective for milder attacks, if taken early.\(^{13}\) Prescription medications may also be used for the treatment of migraine and include both non-specific and specific therapies. Non-specific migraine therapies include non-steroidal anti-inflammatory drugs (NSAIDs), and combinations of analgesics.\(^{13, 14}\) Specifically developed for the treatment of migraines, the triptans are another treatment option for the relief of migraine pain.\(^{14}\)

As with many medications, potential side effects of these drugs should be considered. Side effects associated with NSAIDs include nausea, epigastric pain and dizziness.\(^{15}\) Daily use of opioids can lead to dependency, rebound headaches and decreased efficacy.\(^{14}\) Side effects associated with the use of triptans include nausea, dizziness and asthenia.\(^{15}\)

Non-pharmacological therapies such as relaxation therapy, electrical stimulation, acupuncture, and even hypnosis may also be considered in the treatment of migraine.\(^{10}\)

**What else can I do to manage my migraine?**

There are various things you can do to help reduce the risk of an attack:

- **Keep a diary:** write down what you ate, drank or did, as well as what was going on before your attack. Identifying your triggers means you can take steps to avoid them.\(^{10, 11}\)
- **Eat and drink regularly:** dieting or fasting can bring on an attack. Having your meals at regular times each day may reduce the chance of a migraine. Eating high protein meals can reduce migraine attacks.\(^{9, 10}\)
- **Follow a regular sleep routine:** try going to bed and awakening at the same time each day. Get enough sleep—but don’t oversleep.\(^{10, 11}\)
- **Exercise:** go jogging or join a gym. Keeping your body healthy and fit is a great way to reduce migraines.\(^{11}\)
- **Reduce stress:** regular exercise, deep breathing exercises, yoga, and transcendental meditation can be good stress relievers for many.\(^{9, 10}\)
- **Avoid overstimulation of senses:** avoid using fluorescent lights. Have your sunglasses handy on sunning days. Steer clear of fragranced soaps and beauty products.\(^{10, 11}\)
- **Stop smoking:** smoking is a migraine risk factor. One-third of smokers complain that smoking initiates or exacerbates their migraines. The odour of cigarette smoke can also trigger attacks.\(^{10}\)
- **Behavioural techniques:** relaxation techniques, thermal and electrical stimulation of the head and management skill programs have all been effective in reducing attacks.\(^{10}\)
- **Psychological support:** cognitive behavioural therapy (stress coping) teaches sufferers problem-solving and coping skills that can be used to handle their migraine triggers.\(^{10}\)
- **Physical therapy:** for some sufferers, migraines are induced by physical trauma. Hot packs, ultrasound and therapeutic massage can help diminish pain.\(^{10}\)

Remember that some migraine triggers are unavoidable.\(^{9}\)

**What can I do to help someone who is suffering from migraine?**

Migraine sufferers need your support and understanding.

Many migraine sufferers have a hard time identifying their migraine triggers; you can help them in this process by
keeping your own record of their attacks in a diary. Be as detailed as possible in your notes.

Migraines are debilitating and affect the sufferer’s quality of life. In the midst of a migraine, some people are unable to complete everyday tasks and chores, so you can contribute tremendously by helping them clean the house, taking care of errands or preparing a healthy meal. Your aid with chores will also reduce stress which can help prevent future attacks.8, 10

Migraines can significantly hinder one’s work performance. In fact, migraine sufferers lose on average 6.5 days of work per year and will record 44 days of working with a migraine headache.17 Migraine sufferers should be encouraged to discuss their condition with their employers. When people are open about their situation, employers tend to be more understanding about their employee’s absenteeism. Employers may also play an important role in helping prevent future attacks triggered by stress by re-evaluating workloads and deadlines.18 Given that every year approximately 7 million lost workdays in Canada are attributed to migraines, preventing future attacks greatly benefits both the sufferer and the employer.6

As mentioned earlier, only 1 in 12 migraines are diagnosed.6 Remember that migraines can be effectively controlled.4

For additional information on migraines, available treatments, and what you can do to help, please visit:

- Help for Headaches at: www.headache-help.org
- The World Headache Alliance at: http://www.w-h-a.org
- The International Headache Society at: http://www.i-h-s.org
References:


