What is migraine?
Though often used interchangeably with term “migraine headache,” migraine is actually a more complex condition of the nervous system (a neurological condition) that is characterized by a severe headache, often affecting one side of the head only. The headache may be associated with other symptoms such as nausea and vomiting. A migraine attack can last anywhere from hours to even days and can affect people of any age, sex or ethnicity. Most people are symptom-free between attacks. It is estimated that migraine affects up to 10% of the U.S. population. Migraines are three times more common in women than men, which may be attributable to the hormonal changes associated with the menstrual cycle. The frequency of migraine attacks can vary from a few attacks during a lifetime to one or two attacks a week. Migraine is primarily a condition of younger people (aged 20–50 years) and tends to improve with age.

What are the symptoms of migraine?
Migraine headache is usually described as an intense throbbing or pulsating pain. The headache is often one-sided (unilateral). Migraine sufferers may also experience nausea, vomiting or diarrhea, often accompanied by increased sensitivity to light (photophobia), noise (phonophobia) or smells (osmophobia). A migraine attack may cause some or all of these symptoms. In children the headache may be less severe and stomachache may be the more predominant symptom. An estimated 10 to 30% of migraine sufferers also experience symptoms known as “aura” up to an hour before an attack. These symptoms usually take the form of visual disturbances such as blind spots or flashing lights, or other sensory alterations such as hearing disturbances, confusion, mood changes or coordination problems. Rarely, people may suffer partial paralysis or loss of consciousness. Some migraine sufferers may experience warning symptoms a day or two before an attack. These symptoms are often referred to as the prodrome and may include mood changes (such as irritability or depression), tiredness, hyperactivity, feeling thirsty, a stiff neck or cravings for certain foods.

What causes migraine?
Experts still do not know for certain what causes migraine but it is thought that it may be the result of a chemical imbalance in the brain, which affects the blood vessels and the gastrointestinal tract (digestive system). It is thought that there may be a genetic predisposition to the condition as it often runs in families. It is known that some things can trigger an attack, for example, overtiredness or changes in sleep patterns, high blood pressure (hypertension), alcohol (especially red wine), lack of food or infrequent meals, or eating certain foods (eg, cheese, chocolate, or foods containing monosodium glutamate [MSG]). In some people an attack may be triggered by extreme hot or cold or other environmental factors such as loud noise, strong perfume or a flickering computer screen. Stress is a common trigger and migraine often occurs when the stressful period is over and the body starts to unwind. In women, hormonal changes such as those occurring during the monthly period, pregnancy, menopause, or when taking the contraceptive pill, may trigger an attack. Women are also more susceptible to other trigger factors at these times. Migraine attacks will often be triggered by a combination of factors that occur together rather than one single factor. Therefore, there is a need to be aware of a number of trigger factors. Identifying a single factor may not be enough.
How is migraine treated?
Currently, there is no cure for migraine but usually it can be treated effectively with drugs. Simple painkillers available over the counter, such as acetaminophen, aspirin (Bayer) and ibuprofen (Advil), will be effective in many cases. If not, a combined product also containing codeine may work and may be particularly useful if diarrhea is a symptom. Prochlorperazine, promethazine, and metoclopramide (Metozolv ODT, Reglan) are agents that are available to treat nausea. If stronger painkillers and/or anti-nausea drugs are required, your doctor can prescribe them for you. The newest agents for the acute treatment of migraine are the triptans. This class of drugs is available only by prescription and includes almotriptan (Axert), eletriptan (Relpax), frovatriptan (Frova), naratriptan (Amerge), rizatriptan (Maxalt), sumatriptan (Imitrex) and zolmitriptan (Zomig). In certain cases a combination of sumatriptan and naproxen (Treximet) may also be prescribed. These drugs can help even when an attack has already started. Other treatments your doctor may prescribe include those containing ergotamine. If you suffer from more than two migraine attacks a month and are suffering significant disruption to your life as a result your doctor may prescribe a preventative drug to be taken regularly. This is usually a beta-blocker such as metoprolol (Lopressor, Toprol-XL), nadolol (Corgard), propanolol (Inderal) or timolol. Clonidine may also be prescribed for the prevention of migraine.

Self-help measures
Keep a diary and try to identify any pattern in attacks as this may help to identify any trigger factors. You will need to record all your daily activities, what you eat and drink, the weather, your mood, any attacks and symptoms and any medications you take. You may then be able to prevent attacks by avoiding any trigger factors identified. However, while useful, this is not a fail-safe method as the trigger factors may not always be your control. Stress is a significant trigger for migraine and stress management can be very beneficial. Relaxation techniques and changing daily routines can improve your stress levels.

Further information
National Institutes of Health’s National Institute of Neurological Disorders and Stroke:
www.ninds.nih.gov/disorders/migraine/migraine.htm

Last reviewed: May 2013