

CONDITIONS AND DISEASES

# Syncope

If you have any questions, ask your physician or nurse.

Fainting, or syncope, is the sudden loss of consciousness and ability to stand. It is also known as "passing out." This common problem is the cause of many falls and injuries. About 1 out of every 3 people have fainted at least once during their life. Syncope may happen with or without warning signs. Warning signs may include these symptoms:

- Feeling weak
- Feeling hot or sweating
- Dizziness
- Changes in your vision
- Nausea
- Palpitations

## Causes of syncope

Fainting is due to a sudden decrease in blood flow and oxygen to the brain. There are many causes of syncope. But most fall into 1 of 3 major types.

### Abnormal nerve reflex

Nerves that control heart rate, blood pressure and other body functions may respond in an abnormal way and cause syncope. The following things can trigger syncope:

- Standing
- Pain
- Unpleasant sight or smell
- Stress, anxiety or emotional distress
- Coughing, sneezing or swallowing
- Urinating or having a bowel movement

Fainting due to an abnormal nerve reflex is more likely to happen with certain conditions, such as dehydration, viral infection, after prolonged bed rest, lack of sleep or hunger.

Types of syncope that involve an abnormal nerve reflex include:

■ Vasovagal syncope: This is the most common type and can happen at any age. It often happens when blood pools in the leg veins. This triggers a reflex that causes the heart rate, blood pressure or both to suddenly drop below normal. To prevent vasovagal syncope, avoid situations that may trigger it for you.

- Carotid sinus hypersensitivity: This is more common in older people. In some people, pressure on the neck (such as a tight collar, heavy necklace or a tumor) may affect the nerves that run close to the carotid artery. This can trigger a slow heart rate and/or low blood pressure. Treatment may include a pacemaker.
- Orthostatic hypotension: This is a drop in blood pressure when a person stands up from a lying position. This can happen when you are dehydrated or if you are taking certain medications.
- Postural orthostatic tachycardia syndrome (POTS): This is another type of syncope and dizziness. In POTS, the heart rate is normal when a person is lying down, but becomes fast when they stand up and their body tries to keep a normal blood pressure. The heart rate becomes even faster with a small amount of physical exertion. The blood pressure usually does not drop at first. POTS often happens after viral illnesses or prolonged bed rest. POTS may cause chronic fatigue (extreme tiredness), poor sleep, headaches, dizziness or exercise problems.

#### **Heart conditions**

Defects or damage to the heart may also lead to fainting. Syncope may be related to an abnormal rhythm (arrhythmia). If the heartbeat is too slow or too fast, there may be a lack of blood flow to the brain. Sometimes a thick heart muscle or valve disorder may decrease blood flow. Palpitations, chest tightness, shortness of breath, sweating or a feeling of anxiety may happen before the fainting spell.

#### Other causes

Other diseases, such as diabetes, migraines, seizure disorders or nervous system problems may cause syncope. Since syncope may be the 1st sign of a more serious problem, it is important to see your physician to find out the cause and what treatment you might need.

## **Diagnosing syncope**

Because there are many causes of fainting, making a diagnosis may take time. It begins with a history and physical exam. Tell your physician or nurse about your medical history. Bring a list of all your medications. Describe how you felt (or what you were doing) just before and right after you fainted.

Tests may include an electrocardiogram (ECG), tilt table testing, echocardiogram (ultrasound of the heart), heartbeat monitoring at home or an exercise test. Your physician will let you know if you need more tests.

## **Treating syncope**

Treatment depends on the cause. If fainting is rare, treatment may include being aware of triggers and avoiding certain activities. Be alert to warning signs, such as lightheadedness, nausea or cold, clammy skin. If you feel these symptoms coming on, take steps such as crossing your legs, tightening your leg muscles and/or lying down to try to prevent fainting. Sometimes, drinking more fluids or adding more salt to your diet may help. If fainting continues, a physician may suggest medications or other treatments for heart disorders, as needed.