

Vasovagal syncope

Patient Information – General Medicine

What is vasovagal syncope?

Vasovagal syncope, commonly known as fainting, is a sudden loss of consciousness, followed by a rapid and complete recovery. Symptoms of dizziness or lightheadedness without loss of consciousness is called presyncope (or near-fainting).

Vasovagal syncope is different from cardiac syncope (which is when people lose consciousness due to a heart problem). A person with vasovagal syncope recovers quickly, without specific treatment. However, injuries can occur during vasovagal syncope, and recurrent episodes can be frightening.

Loss of consciousness can also be caused by other conditions, such as low blood sugar, hyperventilation, or seizures. It is important to determine the cause of loss of consciousness, so that it can be prevented or treated in the future.

Vasovagal syncope is best considered as an inbuilt tendency some people have, rather than as a disease.

Vasovagal syncope can be diagnosed if the episodes are typical, and other causes are ruled out by the story, physical examination, and medical tests.

Vasovagal syncope often starts in childhood or teenage years. Sometimes, but not always, there is a family history of fainting tendencies.

Frequency

Vasovagal syncope is very common. About 50% of people faint at some point in their life. It is the commonest cause of loss of consciousness in young people.

Risks

A person who suddenly and unexpectedly loses consciousness can be injured when they fall. Elderly people are more likely to be injured during a syncopal attack and also to have underlying heart problems. Elderly people with recurrent syncope should therefore seek medical attention as they may require more detailed testing to look for other problems.

What causes vasovagal syncope?

To remain conscious, a supply of oxygen-rich blood must be pumped to the brain without interruption. If the brain is deprived of this blood supply, even for a brief period, fainting will occur.

A variety of conditions can trigger vasovagal syncope, including standing in the heat for long periods, standing up too quickly, physical or psychological stress, dehydration, bleeding, pain, weight loss, or medications. The heart rate slows and the blood vessels in the body dilate (widen), causing blood to pool in the legs. This leads to low blood pressure (hypotension) which causes a decrease in blood flow to the brain.

In most cases of vasovagal syncope, a person will have some warning that they are close to fainting. These signs include dizziness, nausea, pale skin, "tunnel-like" vision, and profuse sweating. After the episode, symptoms may persist for a few minutes because of continued low blood pressure. It is not uncommon to experience nausea or even vomiting and/or diarrhoea after an episode. Some people feel tired and weak for several hours afterwards.

Treatment of vasovagal syncope

Vasovagal syncope can usually be managed by taking precautions to avoid potential triggers, and to minimise the risk of harm. For example, if you faint while blood is being drawn, you may be instructed to lie down during the procedure. If you have a feeling that you will pass out, you should immediately lie down and elevate your legs. If this is not possible, you can sit with your head between your knees.

Counter-manoeuvres such as tensing your arms with clenched fists, calf pumping, leg-crossing and buttock-clenching help return blood from the legs back to the brain. They may stop an episode during the warning phase, or at least delay it long enough that you can lie down.

If you are prone to frequent faints, it is important to ensure good fluid intake and have regular meals. Avoiding overheating is useful. For people who faint frequently and have blood pressures that are not high, increased dietary salt can be very helpful to prevent episodes. Check with your doctor first to see if this is a safe option for you. If faints are frequent despite these initial measures, many people find compression clothing helpful (either full length ankle-to-waist sports compression tights, or ankle-to-thigh surgical compression stockings). It is also important to look at any other factors that might increase your chances of fainting, such as sleep deprivation, anaemia or iron deficiency, and any medications that have blood-pressure lowering properties - check with your doctor.

Safety Issues

Passing out during driving or other activities can potentially harm both the patient and those around them. As a result, driving restrictions may be recommended for certain people with syncope. This includes people who have a history of syncope that occurs without warning or without a known cause, especially when sitting down. Check with your doctor.

For more information about:

- hospital and specialist services, go to www.cdhb.health.nz
- your health and medication, go to www.healthinfo.org.nz