

# Canterbury

District Health Board

Te Poari Hauora o Waitaha

## 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 should not be confused with cardiac syncope (which is usually due to a sudden change in heart rate in people with heart disease). A person with vasovagal syncope recovers quickly, almost always without treatment. However, injuries can occur during vasovagal syncope, and recurrent episodes can be frightening.

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

### *Frequency*

Vasovagal syncope is surprisingly common. About one-third of people faint at some point in their life. In young people, cardiac syncope is very rare.

### *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 to have underlying heart problems. Elderly people with recurrent syncope should therefore seek medical attention.

### *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, or medications. The heart rate slows dramatically and the blood vessels in

the body dilate, causing blood to pool in the legs, resulting in low blood pressure (hypotension). This 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 continue because of continued low blood pressure. Some people feel extremely tired and weak.

### ***Treatment of vasovagal syncope***

Vasovagal syncope can usually be treated by learning to take precautions to avoid potential triggers and minimise the potential 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 during any activity, you should immediately lie down and elevate your legs.

Counter-manoevres such as tensing your arms with clenched fists, leg pumping, and leg-crossing may stop a vasovagal syncopal episode, or at least delay it long enough that you can lie down with the feet elevated. Such manoeuvres include:

- Leg crossing while tensing the leg, abdominal, and buttock muscles.
- Handgripping; grip a rubber ball or similar object as hard as possible.
- Arm tensing, which involves gripping one hand with the other while simultaneously moving both arms away from the body.

### ***Safety Issues***

Passing out during driving or other activities can potentially harm both the patient and those around him/her. As a result, driving restrictions are sometimes recommended for certain people with syncope. This generally includes people who have a history of syncope that occurs without warning or without a known cause, especially when sitting down. Driving restrictions are governed by national laws.