

What is Neurocardiogenic Syncope?

- Neurocardiogenic Syncope (NCS) is also known as Vasovagal Syncope (VVS), or Neurally Mediated Syncope. Syncope is another word for fainting.
- This is a condition in which a reflex is triggered that causes a sudden drop in heart rate and/or blood pressure. This leads to a significant decrease in blood flow to the brain, resulting in a loss of consciousness
- The fainting reflex can be triggered by severe many things. Some are situational, like pain, sudden unpleasant sights, sounds, or smells, nausea and vomiting, coughing or swallowing, having a bowel movement, or intense emotional stress. There is also postural NCS, which occurs with prolonged standing or walking
- There are several theories related to why NCS occurs with dysautonomia

What are the symptoms?

- During an episode, the heart rate and BP decreases. If this occurs suddenly the patient may lose consciousness quickly
- Sometimes a patient may experience pre-syncope before an episode
 - Paleness
 - Tunnel vision, loss of vision, blurry vision
 - Nausea
 - Feeling either hot and sweaty or cold and clammy
- During loss of consciousness, the patient may experience anoxic seizures, slow and weak pulses, and dilated pupils

For more information visit
Vanderbilt Autonomic Center:
<https://ww2.mc.vanderbilt.edu/ad/4789>
Mayo Clinic:
<http://www.mayoclinic.org/diseases-conditions/vasovagal-syncope/home/ovc-20184773>

Sources: above websites,
<https://www.ncbi.nlm.nih.gov/pubmed/15875516>
<https://link.springer.com/article/10.1007/s11886-004-0042-7>

How is it diagnosed?

- Patient history, including family history, history of syncope episodes, and medication history
- Tests that rule out other causes of fainting
- Tilt table test
- Carotid massage
- Implanted loop recorder

How is it treated?

- Trigger avoidance
- Increase salt and fluid intake
- Avoidance of medication that may cause vasodilation
- Medication that increases blood volume or increase vasoconstriction, although studies haven't been conclusive
 - Fludrocortisone, midodrine, mestinon, SSRIs, Northera (droxidopa)
- Leg compression – 30-40 mmHg
- Tilt-conditioning
- Elevating the head of the bed 6-12 inches
- Cardiac pacing for patients with severe attacks more than 5 times a year or with severe physical injury and over the age of 40