

Patient's name :- Rampukar Yadav

address :- Laxminiya – 6, Sirha, Nepal

name of disease :- Vasovagal Syncope

Causes of Vasovagal Syncope: Vasovagal syncope occurs when the vagus nerve becomes overactive, causing blood pressure and heart rate to drop suddenly. This results in reduced blood flow to the brain, which can cause a person to faint.

Common causes of vasovagal syncope: 1. Emotional stress – Extreme fear, pain, or anxiety can overstimulate the vagus nerve. 2. Standing for long periods of time – This can cause blood to collect in the legs, reducing blood supply to the heart. 3. Sudden change of body position – Standing up quickly can cause blood pressure to drop. 4. Heat and dehydration – Dehydration and heat can cause low blood pressure. 5. Panic at the sight of blood or a needle – This can cause a rapid reaction in the nervous system, leading to fainting. 6. Excessive strain – Excessive strain while coughing, urinating or defecating can stimulate the vagus nerve.

What happens in the body? (Pathophysiology)

Parasympathetic system becomes more active → heart rate slows down (bradycardia).

Sympathetic system becomes less active → blood vessels dilate, causing blood pressure to drop.

Blood flow to the brain decreases → person faints.

Treatment:- Non-Invasive Vagus Nerve Stimulation (nVNS):- 1. Direct effect on the vagus nerve
Nuvance therapy stimulates your vagus nerve, thereby restoring balance to the autonomic nervous system.

Reduced excessive vagus nerve activation → normalized heart rate and blood pressure.

Improved blood flow to the brain → improved fainting.

2. Controlled vasovagal syncope :- Excessive activation of the vagus nerve used to slow your heart rate and lower blood pressure, causing fainting. Nuvance therapy reduced this response, thereby stabilizing blood pressure and heart rate. It rebalanced your autonomic nervous system, thereby eliminating fainting.

3. Nervous system and neurotransmitter balance :- Vagus nerve stimulation releases neurotransmitters such as acetylcholine, serotonin, and norepinephrine, which: reduces stress, improves oxygen supply to the brain, improves neurological activity, which can lead to quick recovery from fainting.

4. Improves blood circulation :- Stimulation of the vagus nerve improves the activity of the heart and blood vessels, ensuring that the brain receives adequate blood and oxygen. Continuous therapy for 5 days increases the body's adaptation capacity and your syncope heals quickly.

5. Physical and mental stability :- Nuvance therapy normalizes your autonomic nervous system, which reduces your :- stress, speeds up your body's recovery, stabilizes blood pressure and heart rate

Conclusion

Your rapid recovery (within 5 days) is possible because non-invasive vagus nerve stimulation directly balances your nervous system, blood flow, and neurotransmitter system. This leads to rapid improvement in vasovagal syncope symptoms and elimination of fainting.

