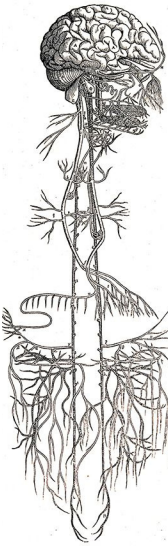


Vagus Nerve Injury



What is the Vagus Nerve?

The vagus nerve is one of the 12 cranial nerves and plays a large role in the parasympathetic nervous system, the system that controls bodily functions on an unconscious level. The vagus nerve is responsible for a wide variety of bodily functions (digestion, heart rate, breathing, reflex actions & cardiovascular activity) and injury to this nerve can result in a wide variety of changes in functioning.

CHANGES TO DIGESTION

The vagus nerve plays a role in controlling the muscles of the digestive tract, which allow food to move through the body. When the vagus nerve is damaged, the digestive tract may not be able to move food through the digestive tract, causing issues with digestion. Symptoms of injury can include:

- Nausea & vomiting
- Loss of appetite
- Acid reflux
- Abdominal pain/bloating
- Constipation



Management strategies include:

- Dietary Changes
- Medication to manage symptoms (ex. nausea, abdominal pain/bloating, improve stomach emptying)
- Gastric electric stimulation - sends electrical signals to the muscles of the digestive tract to promote the movement of food through the tract



Vagus Nerve Injury

CHANGES TO SPEECH & SWALLOWING

The vagus nerve plays a role in controlling the opening and closing of the vocal cords, which allows us to talk, and controls the pitch of our voices. Symptoms of injury can include:

- Weak or "breathy" voice
- Difficulty projecting voice
- Frequent voice "cracking"
- Voice "wears out" easier



The vagus nerve plays a role in controlling the muscles of the tongue, back of the mouth, and throat to control swallowing.

Symptoms of injury can include:

- Difficulty swallowing
- Frequent choking



Management strategies include:

- Speech-language therapy to improve swallowing and speech
- Changing diet consistency (ex. eating minced, pre-cut foods, thickening liquids)

CHANGES TO BLADDER FUNCTION

The vagus nerve plays a role in urination by controlling the relaxation and contraction of bladder muscles. With vagus nerve injury, people may experience:

- Incontinence or leaking urine
- Frequent urinary tract infections

Management strategies include:

- Medications
- Regular bladder emptying
- Botox injections into bladder muscle

