Dysautonomia

Category: 2 Symptom

What is dysautonomia?

The **autonomic nervous system** is the part of your nervous system that controls the automatic functions in your body (organ functions which you do not consciously control). Among other things, the autonomic nervous system regulates heart rate, blood pressure, breathing rate and pattern, digestion, and temperature.

The autonomic nervous system is made up of the **sympathetic nervous system** ('fight or flight') which prepares the body for action and the **parasympathetic nervous system** ('rest and digest') which brings the body back to baseline. Normally, the body automatically switches back and forth between these two states with ease, depending on what you are doing throughout the day.

Dysautonomia (also known as autonomic system dysfunction) is disruption in the balance between the parasympathetic ('rest and digest') and the sympathetic ('fight or flight') nervous systems. In dysautonomia, the pull towards fight or flight can become stronger (stress response is stuck in the 'on' position).

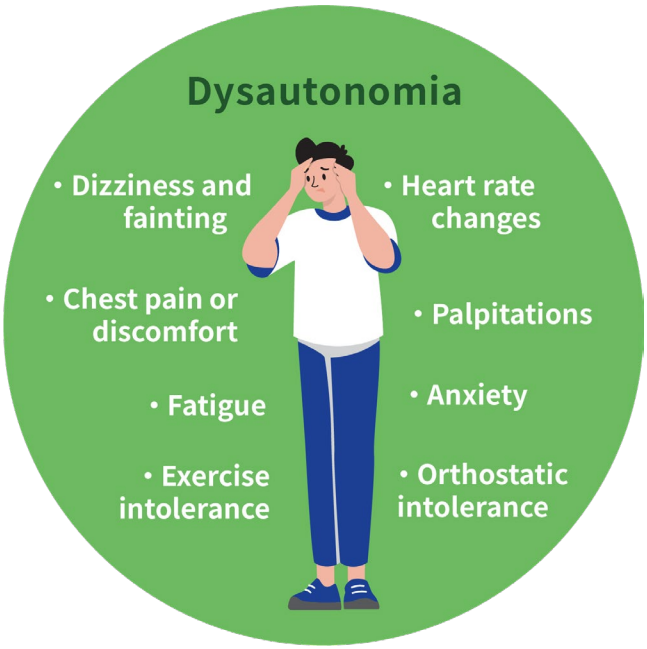
Although we do not know yet for sure, we think that some of the symptoms experienced by Long COVID patients may be due to dysautonomia.

It is possible that dysautonomia may be responsible for additional symptoms in Long COVID, but more research is needed to find out for sure. Some of these symptoms include:

- Intolerance to heat or cold
- Increased or decreased sweating
- Increased thirst
- Digestion issues (bloating, constipation, diarrhea) Urination problems (sudden urge, difficulty initiating, or emptying fully)
- Sensory sensitivity (lights, sounds, smells, touch becoming more intense)

However, as there are several other illnesses that can cause these symptoms, we suggest that you speak with a doctor if you experience them.

Symptoms of dysautonomia



In Long COVID, we think that dysautonomia is the underlying cause of postural orthostatic tachycardia syndrome (POTS) and inappropriate sinus tachycardia. These may lead to the following symptoms:

- Heart rate changes (often higher heart rates, but can also be low or large fluctuations)
- Palpitations (feelings of having a fluttering, racing, or pounding heart)
- Chest pain or discomfort
- Anxiety
- Fatigue
- Exercise intolerance

- Orthostatic intolerance (difficulty with being in the upright position)
- Dizziness and fainting

Strategies to tone down 'fight or flight' response / increase 'rest and digest' response

Bottom-up: Using signals from our body to influence the nervous system

- Pacing
- Breath work
- Relaxation techniques
- Hydration/Nutrition
- Sleep
- Gentle movement*
- Slowly increasing activity tolerance*

Top-down: Using thoughts and mindset to influence the nervous system

- Stress reduction/coping strategies
- Counselling
- Medication/relaxation
- Connection with community
- Safe, joyful activities
- Spending time in nature

* Must be done very carefully to avoid post-exertional worsening of symptoms