

Definitions

- Long COVID: a prolonged illness after COVID-19, which may persist for months after the acute infection
- Long Vax: a temporal correlation between receiving a COVID-19 vaccine and the beginning or worsening of clinical manifestations (when the symptoms are unexplained by other concurrent causes)

Symptoms of Long COVID

Click on any hotspot on the human body to learn more about Long COVID symptoms.

Symptoms

- According to the NIH, almost anything can be attributed to Long COVID

- Whole Body
- Brain and Nerves
- Eyes
- Ears
- Smell and Taste
- Neck
- Lungs
- Heart and Blood
- Kidneys
- Hands
- Legs and Feet
- Reproductive Systems
- Digestive Systems
- Skin and Hair
- Muscles and Bones



Difference in symptoms

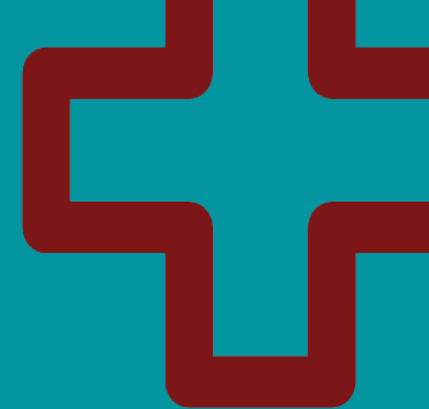
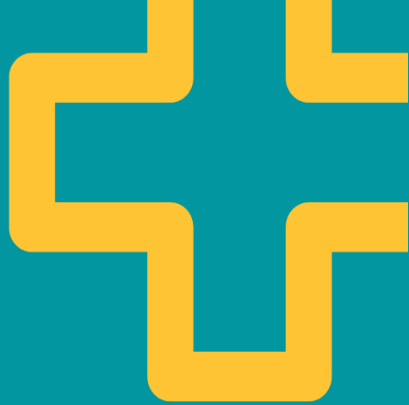
- Essentially the same illness
- Post-vax patients are sicker
- Long COVID patients tend to get better with time, albeit slowly
- Some Long COVID patients have persistent pulmonary involvement from acute illness
- Similarities to ME/CFS

Groups of Symptoms

- Respiratory: *shortness of breath, congestion, persistent cough, etc.*
- Neurological/psychiatric: *brain fog, malaise, tiredness, headaches, migraines, depression, inability to focus or concentrate, altered cognition, insomnia, vertigo, panic attacks, tinnitus, anosmia, phantom smells, etc.*
- Musculoskeletal: *myalgias, fatigue, weakness, joint pains, inability to exercise, post-exertional malaise, inability to perform normal activities of daily life*
- Cardiovascular: *Palpitations, arrhythmias, Raynaud-like syndrome, hypotension, and tachycardia on exertion*
- Autonomic: *Postural tachycardia syndrome (POTs), abnormal sweating*
- Gastrointestinal disturbance: *anorexia, diarrhea, bloating, vomiting, nausea, etc.*
- Dermatologic: *itching, rashes, dermatographia*
- Mucus membranes: *running nose, sneezing, burning and itchy eyes*

Most common

- **Fatigue:** Persistent fatigue that is new, debilitating exertional intolerance, no energy to do anything, feeling best when they are lying down or in bed.
- **Post Exertional Malaise:** When patients try to exert themselves, their fatigue ramps up, and the other symptoms they suffer from will flare up.
- **Brain Fog:** Some cognitive deficit, ranging from word-finding difficulty, short-term memory problems, forgetting tasks, trouble with concentration and focus, and in rare cases delusion and disorientation.



I-RECOVERSM
POST-VACCINE TREATMENT

**An approach to managing
post-vaccine syndrome**

I-RECOVERSM
LONG COVID TREATMENT

**An approach to treating
long COVID**

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A L L I A N C E

Treatment strategies

First-Line	Adjunctive/Second-Line	Third Line
Intermittent daily fasting or periodic daily fasts	Hyperbaric oxygen therapy	Low Magnitude Mechanical Stimulation (LMMS or Whole-Body Vibration)
Ivermectin (0.2-0.3 mg/kg daily)	Triple anticoagulation	“Mitochondrial energy optimizer”
Moderating physical activity	Vitamin D (4000-5000 units daily) and Vitamin K2 (100 mcg daily)	Low dose corticosteroid; 10-15 mg daily prednisone for 3 weeks. Taper to 10 mg daily and then 5 mg daily, as tolerated
L-Arginine (1.5 -2g twice daily) and Vitamin C (1000 mg orally two to three times daily)	Magnesium (100-200 mg daily)	
Low-dose naltrexone (1-4.5 mg daily)	Omega-3 fatty acids; we suggest a combination of EPA/DHA with an initial dose of 1 g daily (combined EPA and DHA) and increasing up to 4 g daily (of the active omega-3 fatty acids)	
Nattokinase (100-200 mg / 2000- 4000 Fibrinolytic Units twice daily). Low dose aspirin (81 mg daily) can be added in low-risk patients.	N-acetyl cysteine (NAC) (600-1500 mg daily)	
Treatment of Mast Cell Activation with histamine blockers and mast cell stabilizers	Sildenafil with or without L-arginine-L-Citrulline	
Sunlight and Photobiomodulation (PBM)	Spermidine; 1000-2000 mg (wheat germ extract) daily	
Melatonin (2-6 mg slow release/extended release prior to bedtime)	ARC microcurrent device	
Bromelain (500 mg twice daily) +/- N-acetyl cysteine (NAC) (600 mg twice daily)	Methylene blue (10-30 mg daily)	
Nigella sativa (200-500 mg encapsulated oil twice daily)	Non-invasive brain stimulation (NIBS)	
Resveratrol or a combination flavonoid (400-500 mg daily)	Intravenous Vitamin C; 25 g weekly, together with oral Vitamin C 1000 mg (1 gram) 2-3 times per day	
Probiotics/prebiotics	Behavioral modification, relaxation therapy, mindfulness therapy, and psychological support	
Vagus Nerve Stimulation and nicotinic agonists		

L-Arginine and Vitamin C

Dosing and administration

We suggest a dose of L-arginine of 1.5 -2g twice daily, plus Vitamin C 1000 mg orally two to three times a day.

Treatment of Mast Cell Activation

- H1/H2 blockers
- Low-histamine diet
- Mast Cell Stabilizers
 - Ketotifen
 - Cromolyn
 - Luteolin
 - Vitamin C
 - Turmeric
 - Montelukast

Vagus Nerve Stimulation and nicotinic agonists

- Stimulation of the vagus nerve has anti-inflammatory, analgesic, and antidepressant effects.
- Treating patients with post-COVID-19 syndrome with a nicotine patch has been reported to produce a substantial improvement in symptoms

ARC microcurrent device

- Influences growth, adaptation, and tissue repair, by optimizing physiological functions, including nervous system signalling, muscle growth, and remodelling
- Worn on the lower legs of subjects and goes through a 3-hour alternating cycle