

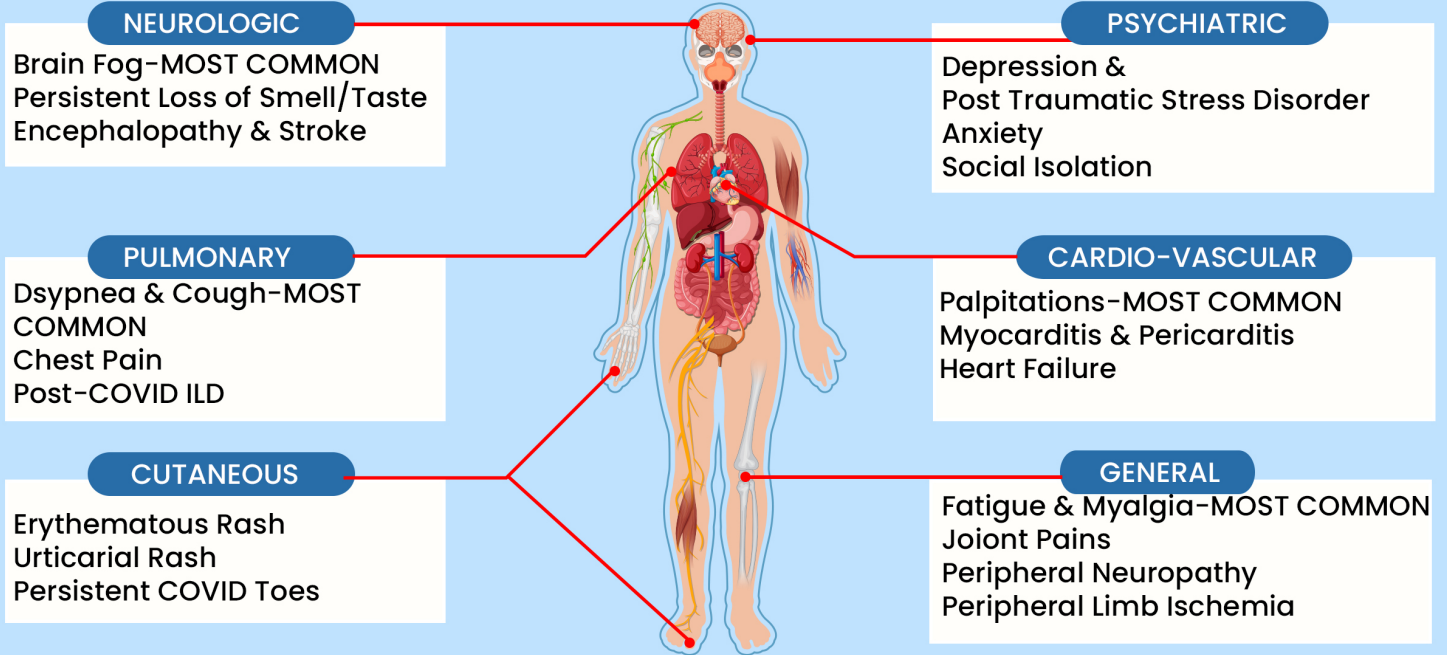
POST COVID COMPLICATIONS

: PERSISTING SYMPTOMS & BEYOND



Contact Info:

Email:



WHAT IS POST COVID / LONG COVID SYNDROME

Persisting symptoms

Beyond 3 weeks up to 6 weeks: _____

6 weeks to 6 months: _____

More than 6 months: _____

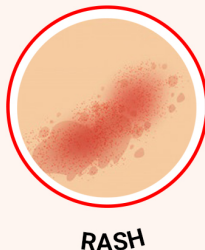
(in 20% recovered patients)

Post covid

Intermediate covid

Long covid

PERSISTENT SYMPTOMS INCLUDE





ACUTE COMPLICATIONS OF COVID-19

POST-COVID SYMPTOMS, SEQUELAE

- NEUROPSYCHIATRIC**
- ★ Cerebrovascular accident
 - ★ Large vessel disease
 - ★ Encephalopathy, delirium
 - ★ Anosmia, ageusia

- RESPIRATORY**
- ★ Pneumonia
 - Hypoxemic respiratory failure, ARDS

- CARDIOVASCULAR**
- ★ Arrhythmia
 - ★ Myocarditis

- HEMATOLOGIC, VASCULAR**
- ★ Coagulopathy
 - ★ Thrombotic events

- RENAL**
- ★ Acute kidney injury

- GASTROINTESTINAL, HEPATOBILIARY**
- ★ Diarrhea
 - ★ Acute Liver injury

- MUSCULOSKELETAL**
- ★ Rhabdomyolysis

- DERMATOLOGIC**
- ★ Livedo reticularis
 - ★ Maculopapular or urticarial rash

- NEUROPSYCHIATRIC**
- ★ Neurocognitive deficits
 - ★ Mood Changes
 - ★ Sensory & motor deficits
 - ★ Chronic fatigue & sleep disruption

- RESPIRATORY**
- ★ Persistent dyspnea
 - ★ Chronic cough

- CARDIOVASCULAR**
- ★ Chest Pain
 - ★ Palpitations

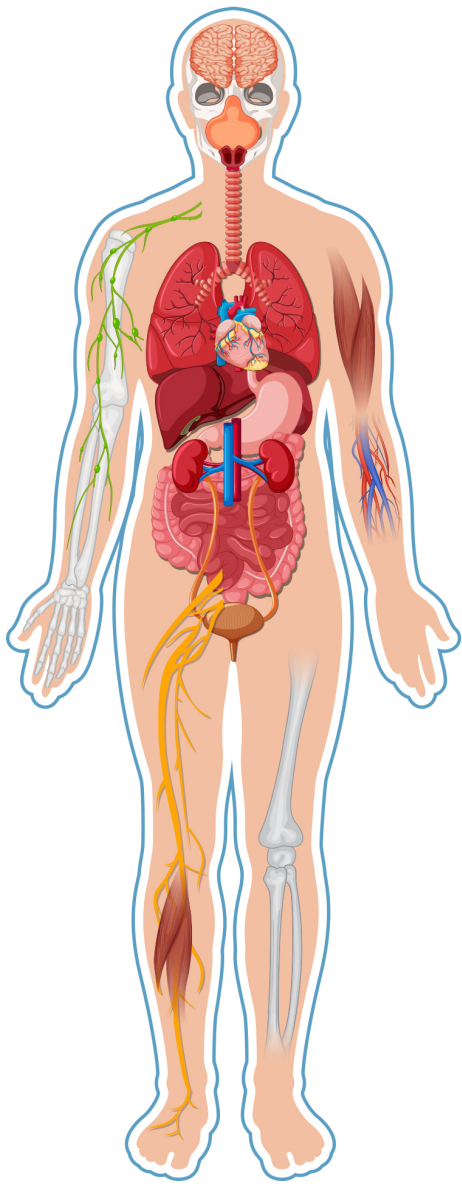
- HEMATOLOGIC, VASCULAR**
- ★ Persistent or recurrent thrombosis

- RENAL**
- ★ Chronic Kidney disease

- GASTROINTESTINAL, HEPATOBILIARY**
- ★ Persistent Liver dysfunction

- MUSCULOSKELETAL**
- ★ Muscle Wasting
 - ★ Weakness
 - ★ Deconditioning

- DERMATOLOGIC**
- ★ Hair loss



Post discharge follow up

First 2 weeks:

Tele-consultation
if severe symptoms: Investigate and physical exam.

After 2 weeks: (followed by every month till 6 months)
Physical consultation
Investigations (as indicated) by symptoms
Psychological assessment at least once
Evaluation by specialist if needed

Blood Tets

Full blood count
Electrolytes
Liver & renal function
Troponin
C reactive protein
Creatine Kinase
D-dimer
Brain natriuretic peptides
Ferritin-to assess inflammatory & prothrombotic states

Other Investigations

Chest X ray
Urine tests
12lead electrocardiogram

Specialized investigations

For breathlessness:

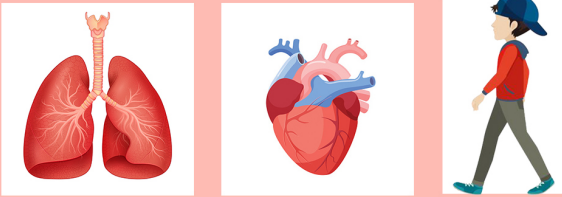
HRCT chest
Pulm Function test
Echocardiography

For cardiac symptoms:

Echo,
Holter
Autonomic function tests
For CNS related issues:
CECT/ MRI, NCV (if needed)

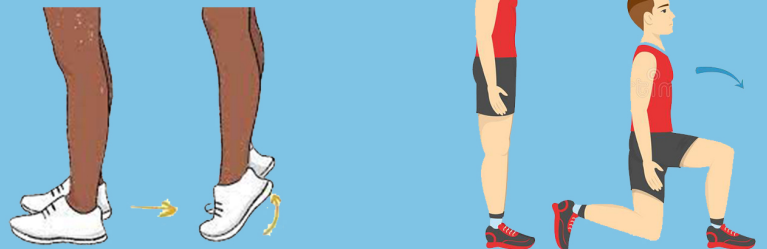
MANAGEMENT OF POST COVID SYNDROME

Start Moving-Start low, go slow, increase gradually



Deep breathing: on back & on stomach, Humming or singing

Build Strength-
Increase muscle strength
Ankle Raise

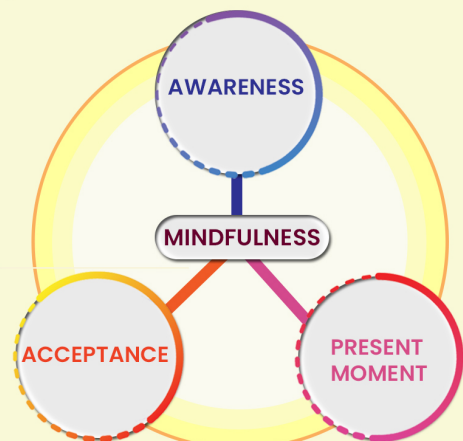


Gain Endurance

Week 1: 5-10 minute walks daily
Week 2: 10-15 minutes walks daily
Week 3: 5-10 minutes walks daiy
Week 4: 20-25 minnute walks daily
Week 5-6: 20-25 minnute walks daily



- NSAIDs for aches and pains
- Sometimes steroids may be needed
- Anxiolytics for anxiety/sleeplessness
- Small, frequents, fresh meals
- Going back to normal routine



POST-COVID SYNDROME

PSYCHOLOGICAL

- ★ Depression & anxiety
- ★ Post-traumatic stress

NEUROLOGICAL

- ★ Cognitive impairment
- ★ Headache
- ★ Taste and smell alterations
- ★ Post-traumatic stress
- ★ Sleep disturbances
- ★ Peripheral neuropathy
- ★ Dizziness
- ★ Delirium

CARDIOVASCULAR

- ★ Chest tightness
- ★ Palpitations
- ★ Orthostatic hypotension
- ★ Syncope
- ★ Dysautonomia

RESPIRATORY

- ★ Dyspnea
- ★ Chest pain
- ★ Cough

MUSCULOSKELETAL

- ★ Fatigue
- ★ Weakness
- ★ Osteoarticular pain
- ★ Muscular pain

OTHERS

- ★ Abdominal pain
- ★ Nausea
- ★ Diarrhea
- ★ Anorexia

POTENTIAL BENEFITS OF EXERCISE

PSYCHOLOGICAL

- ★ Modulates pain
- ★ Well-being & mood state
- ★ Stress

NEUROLOGICAL

- ★ Stimulate brain plasticity
- ★ Cognitive dysfunction
- ★ Allostatic overload
- ★ Sleep quality

CARDIOVASCULAR

- ★ Mitochondrial biogenesis
- ★ Vasculature
- ★ Cardiovascular function
- ★ Blood pressure
- ★ Normalizes dysautonomia

RESPIRATORY

- ★ Dyspnea
- ★ Oxygen uptake
- ★ Pulmonary function
- ★ Oxidative stress

MUSCULOSKELETAL

- ★ Muscle mass
- ★ Muscle strength
- ★ Intermuscular coordination
- ★ Tolerance to exercise

IMMUNE SYSTEM

- ★ Immune function
- ★ Anti-inflammatory cytokines
- ★ Pro-inflammatory cytokines
- ★ Immunosenscence

