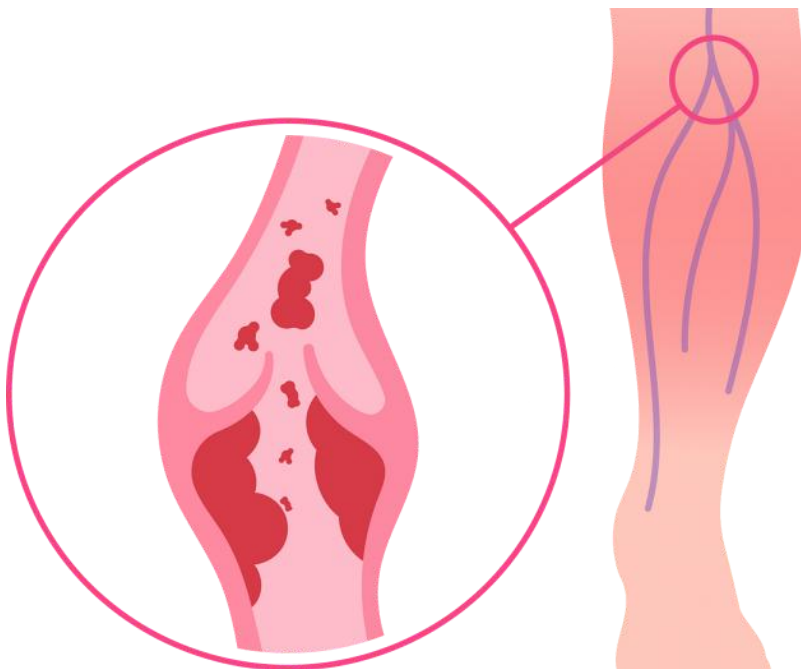


A Guide for Patients and Families

Care of Patients with Compartment Syndrome

What is a Compartment Syndrome?

Compartment Syndrome occurs when pressure within a confined space, or compartment in the body increases. This decreases blood flow, prevents nourishments and oxygen supply to nerve and muscle cells, and can result in death (necrosis) of the muscles.



Types of Compartment Syndrome

Acute Compartment Syndrome is usually caused by injury. It comes fairly quickly after injury and needs urgent treatment. If not treated, it could lead to permanent muscle damage.

Chronic or exertional compartment syndrome is usually caused by athletic exertion or exercise. It is relieved with rest but may return when activity starts again.



Causes:

Acute

- Fractures of bone.
- Severely injured muscle.
- Crush injuries.
- Constricting bandages and tight fitted plaster cast.

Signs and symptoms

- Increasing pain even when the fracture is immobilised.
- Excessive pain when using or stretching involved muscles.
- Tingling or burning sensation (paresthesia).
- Pale colour of the skin (pallor).
- Weaken or absence of pulses.
- Coolness of the skin.
- Numbness
- Inability to move the limb (paralysis).

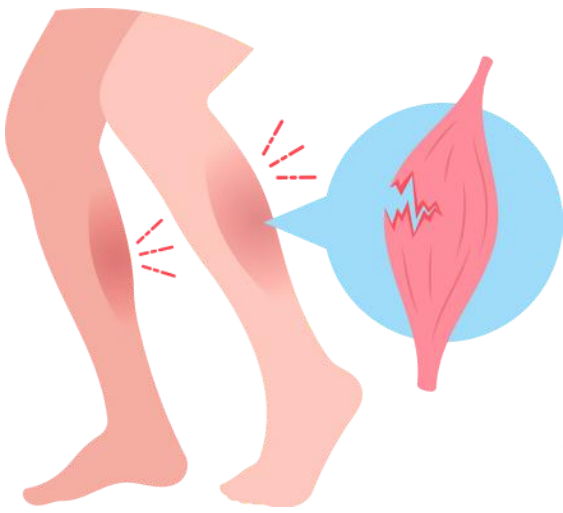
Chronic

- Exercises with repetitive motions e.g. running, biking.
- Increase in muscle mass for athletes.

Signs and symptoms

- Numbness
- Difficulty moving the foot.
- Visible muscles bulging.





Diagnosis & Treatment:

Acute

- The main treatment is prompt diagnosis and early surgery (fasciotomy) to release the pressure within the muscles.

Chronic

- Surgery (fasciotomy)
- Non-surgical treatment includes reducing or limiting the triggered activity, changing training regime, deep massage treatments, anti-inflammatory medications and use of orthotics to restrict or modify the movement.



When to consult a doctor after discharge

- Persistent fever ($>38.5^{\circ}\text{C}$), chills and cold.
- Foul smell from the wound.
- Excessive drainage from wound.
- Swelling over surgery site.
- Pain even after medications.
- Excessive pain upon using or stretching the muscles.
- Tingling or burning sensation.
- Inability to move the limb.
- Pale colour of the skin.
- Weaken or absence of pulses.