



A Patient's guide to

Acute Compartment Syndrome

This leaflet has been produced to help inform you about Acute Compartment Syndrome.

What is Acute Compartment Syndrome?

Acute Compartment Syndrome is a painful condition that can affect adults and children. It occurs when swelling or bleeding causes increased pressure within the muscle compartments.

The muscles in the arms and legs lie in compartments enclosed by a layer of tissue called fascia. Included within the compartment are also blood vessels and nerves. The result of increased pressure within the compartment can reduce blood flow and prevent oxygen and nutrients reaching nerve and muscle cells.

Without urgent treatment it can lead to permanent nerve and muscle damage.

What are the signs and symptoms of Acute Compartment Syndrome?

- The main symptom is severe pain that is constant. The severe pain may worsen upon limb movement when the muscles affected are stretched
- Tingling or burning sensation in the area
- The skin in the affected area may become pale, cold, tense and hard
- Reduced strength and movement in the affected area.

Acute Compartment Syndrome is a medical emergency. If you experience any of these signs or symptoms, you should inform a member of your Consultant's team or attend your local accident and emergency department immediately.

When does Acute Compartment Syndrome occur?

Acute Compartment Syndrome usually will be diagnosed and treated when you are already in the hospital, i.e. after your operation.

It can occur, however, several days after surgery and may happen following discharge from hospital.

When am I at risk of Acute Compartment Syndrome?

- After you have had an orthopaedic procedure to a limb
- After you have had a fracture, burn or crush injury to a limb
- After you have a cast, bandage or skin traction in place.

Increased risk of bleeding

You have an increased risk of bleeding into the compartments following surgery if:

- You are taking anticoagulant drugs such as Warfarin
- You are taking medication which affects blood clotting, such as Aspirin or Clopidrogel and some painkillers
- You have Haemophilia or another known bleeding disorder
- A family history of major bleeding
- You have high blood pressure
- You have a low platelet count
- You have severe liver or kidney disease

How is Acute Compartment Syndrome treated?

Acute Compartment Syndrome is a medical emergency and should be treated as quickly as possible to reduce the likelihood of permanent nerve and muscle damage.

An operation called a “fasciotomy” is performed to relieve the pressure within the muscle. This involves the skin and fascia being cut open. The wound may be left open for several days to prevent pressure building up again. The wound may be left to heal by itself or skin grafting may be used. This will result in permanent scarring.

How can the risk of compartment syndrome be reduced?

- Elevate your limb to help reduce swelling
- Inform your healthcare team or plaster room if your cast or bandages feel tight
- Stop smoking
- Do regular exercise
- Take any medications for high blood pressure or high cholesterol according to the instructions
- Eat a healthy balanced diet and reduce any excess weight.

Remember

Acute Compartment Syndrome is a medical emergency. If you experience any of these signs or symptoms, you should immediately:

- Contact a member of your consultant's team via the hospital switchboard on 020 8954 2300
- If out of hours or unable to contact the team, attend your local accident and emergency department immediately.

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If you have any comments about this leaflet or would like it translated into another language/large print, please contact the Clinical Governance Department on 020 8909 5439/5717.

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