

ANTERIOR COMPARTMENT SYNDROME

The muscles in the lower leg are divided into a number of compartments encased by thick connective tissue. Within these 'compartments' sits muscles, nerves and blood vessels. The anterior compartment is located at the front of the outside of the shin bone (tibia)

Typically when we exercise, blood flow to our muscles increases to meet the energy requirements of the working muscles. This increased flow causes the muscles to 'swell'. In the situation where there is not enough room in the compartment to accommodate the increase in muscle volume, inter-compartmental pressure rises which can produce pain.

WHAT WILL YOU FEEL?

- ✚ **Pain (aching, cramping) at the front of the shin** felt to the outside of the shin bone
- ✚ Generally pain is only felt during exercise and ceases when exercise stops (as the pressure within the compartment returns to normal)
- ✚ In some cases sensations of numbness, weakness or pins and needles can be experienced in the lower leg and foot.

WHAT DOES TREATMENT INVOLVE?

Rest from activity is the first step to managing anterior compartment syndrome. Attempting to exercise through the pain of this condition will only tighten the connective sleeve further.

Treatment from your physiotherapist will involve:

- ✚ **Soft tissue releases** to tight muscles in the lower leg.
- ✚ **Exercise prescription** to strengthen weak, underactive muscles and stretch tight, overactive muscles.
- ✚ Advice regarding activity modification, footwear, the need for orthoses etc.
- ✚ **Dry Needling / Acupuncture**

In some cases, where conservative treatment fails

to provide relief from symptoms, surgery may be required. This involves 'releasing' the tight connective tissue sleeve surrounding the compartment to allow the muscles to expand during exercise without increasing the compartments pressure.

WHAT SHOULD YOU DO?

Anterior compartment syndrome unfortunately **will**

not get better on its own. If you suspect you may be suffering from this condition you should seek advice from your physiotherapist for treatment and implementation of a management plan.

There are several possible causes for pain at the front of the shin. To make an accurate diagnosis you may be referred for compartment pressure testing which can be done by a sports physician.

If you would like to make an appointment, contact the practice on **(02) 9328 3822**. Ross and Emma are the physiotherapists for Easts Rugby Union and specialise in the treatment of musculoskeletal conditions.

