

# POSTERIOR ANKLE IMPINGEMENT

### WHAT IS POSTERIOR ANKLE IMPINGEMENT?

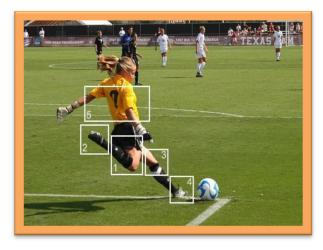
Posterior ankle impingement is classified as an irritation or compression occurring at the back of the ankle where the tibia (shin bone) and talus (ankle bone) join.

#### **ANATOMY:**

The ankle joint is a hinge joint that comprises of the talus, tibia and fibula bones. There are many supporting ligaments which play important stability and proprioceptive roles.

#### **MECHANISM OF INJURY:**

When the foot and ankle are pointed into full plantar flexion the ankle is compressed at the back. This compression may result in tissue damage and pain when these movements are repetitive and/or forceful in nature. This may be particularly the case following previous ankle injury where there may be thickening or swelling present and also in the presence of bony abnormalities such as an os trigonum (extra bony prominence).



## CAUSES OF POSTERIOR IMPINGEMENT:

- Repetitive planter flexion of the ankle joint in sports such as swimming, gymnastic and ballet dances
- Previous ankle sprains
- Bony abnormalities
- In association with other conditions such as Achilles tendinopathy

#### **DIAGNOSIS:**

A thorough subjective and objective examination will assess the current history of the condition including aggravating factors, exercise behaviours and previous injuries. The physiotherapist may perform some provocation tests including a heel raise test and a passive toe-pointing test looking for discomfort or restriction of movement.

An X-ray may be required to view the possibility of bony abnormality, bony bruising or fluid present in the posterior ankle.



### SIGNS AND SYMPTOMS:

- ➤ Pain in the back of the ankle, especially when completing toe-pointing behaviours.
- > Swelling or thickening in the back of the ankle.
- Pain can often refer into the foot or into the Achilles.

## PHYSIOTHERAPY TREATMENT OPTIONS:

- Deep tissue massage
- Muscle energy techniques
- Mobilization with movement techniques
- Joint mobilisation and manipulation
- Stretching program
- Dry Needling
- Education
- Pain relief strategies
- Electrotherapy
- Kinesio taping

