Posterior Impingement Syndrome

What is it?

The human ankle joint primarily consists of two bones; the Tibia (shin bone), and the Talus (small articular bone that sits beneath the Tibia). When this joint is placed in maximal plantar-flexion (toes pointed to ground), the posterior (behind) aspect of the joint can become compressed or impinged. Symptoms often include: Posterior ankle pain, Achilles discomfort, pain while standing on toes/while sleeping and a 'feeling as if their ankle needs to be cracked'. This condition is known as Posterior Impingement Syndrome (PIS) and is characterised by posterior ankle soft tissue or bony damage, secondary to excessive plantar flexion (either chronically or a single event).

Why did I get it?

Although people of all ages and gender can suffer from PIS, the most common people presenting with the injury are footballers, ballet dancers and gymnasts. The majority have the following risk factors:

- Excessive ankle range motion
- Acute trauma (e.g. tackle)
- Poor biomechanics (alignment)
- Accessory bone (Os Trigonum)
- Poor footwear
- Secondary to severe ankle sprain

Symptoms:

- Pain is usually felt at the back of the ankle.
- There will be tenderness behind the bottom tip of the fibula bone.
- Pain will most likely be worse at the end of the movement when the foot is pointed down into plantarflexion with the foot pointing downwards.
- Going up onto tiptoes may be painful.
- An X-ray can show up any bony spurs on the talus (heel bone) and end of the tibia (shin bone).

How is it diagnosed?

A thorough clinical examination and history will generally be sufficient for the diagnosis of Anterior Impingement Syndrome. You will more than likely be referred for an x-ray or Ultrasound to determine the exact cause of the impingement and to rule out further pathology.

Possible Treatments:

- Rest, Ice & compression
- Footwear advice
- Strengthening/stretching
- Padding/strapping

- Custom orthotics
- Activity modification
- Cortisone injections
- Surgery

Prognosis:

Providing patient compliance, mild cases of Posterior Impingement Syndrome generally respond to the above conservative treatment options. Corticosteroid injections & surgery are reserved for non-responsive/severe cases and are rarely indicated.



