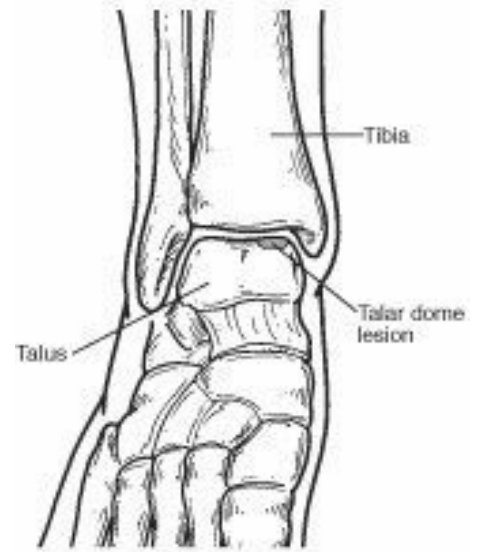


Talar Dome Injuries/Lesions

The ankle joint is formed by the articulation of the tibia, fibula and talus, the top of which is referred to as the talar dome due to its shape. The joint surfaces are covered in articular cartilage and this is normally smooth, allowing for efficient shock absorption and smooth movement between the bones. A talar dome injury comprises damage to the cartilage and sometimes underlying bone of the talus. Onset of these injuries can be acute and traumatic, such as during a bad ankle sprain, or slow onset related to repeated poor loading over time.

SIGNS & SYMPTOMS



- Deep ankle pain – usually anteriorly.
- Increased pain with:
 - Weight-bearing, especially with activities involving pivoting,
 - twisting & change in direction (eg. soccer, touch footy)
 - Prolonged standing/walking (worse with poor footwear/barefoot or on hard/uneven surfaces)
 - Going up/down stairs and hills
 - Jumping down from a height or landing hard onto the foot
 - With increased load (eg. if carrying heavy weights)
- Ankle pain on waking.
- Ankle joint swelling, stiffness, tenderness to touch, clicking/catching &/or locking.
- In the worse cases, may have a limp or be unable to tolerate weight-bearing at all.

DIAGNOSIS

Talar dome lesions can be difficult to diagnose at times. Your Physiotherapist should perform a thorough examination and

may suspect it based on the clinical history given in regards to the activity being undertaken at the time of pain, the location of the pain and the presenting signs/symptoms.

Radiological investigation can also aid in diagnosis (eg. X-Ray, MRI, CT scan, Bone scan).

RISK FACTORS

There is a greater chance of a talar dome injury occurring and possibly a slower recovery period with the following risk factors:

- Obesity
- Ankle joint stiffness
- Poor foot and lower limb biomechanics
- Inappropriate footwear
- Participation in high impact activities (eg. gymnastics, skiing, running)
- Inappropriate training surfaces (eg. concrete, uneven/unstable ground)

TREATMENT

Initially, the aim of treatment is to settle the injured tissue through ice, anti inflammatory medication, and advice on appropriate reduction in weight bearing. In more severe cases, use of taping or provision of crutches or a boot may be required. The second phase of rehabilitation involves restoration of joint mobility and provision of appropriate lower limb strength and control exercises.

When ready, the final stage of rehab is return to pre injury sports and activity level. This will generally be accompanied by provision of high level strength and control exercises in order to ensure that the muscles adequately protect the injured tissue.

The overall prognosis will depend on the severity of the injury and how well it is managed in the early phases. The vast majority of these injuries, if managed well, will do very well with conservative management. Very occasionally, due to the degree of tissue damage, surgery may be required, often resulting in greater ongoing functional restriction.

Return to sport/pre-injury activities may take anywhere from several weeks to many months, again depending on the injury severity. Your Physiotherapist should provide you with a graded functional exercise program and will guide you as to when you are safe to upgrade your activity level.

Article by Danielle Smith