ANKLE SPRAIN

DESCRIPTION

A sprained ankle is an acute injury with resultant damage to the ligaments of the ankle. The more serious the sprain, the greater the damage and the more tissue that may be involved. The range of damage can go from mild damage to the ligament up to including muscle, tendon and bone.

A sprain results from a sudden movement that exceeds the range of motion of the ankle joint. If cared for improperly, the problem can become chronic. If treated quickly and properly, the ankle should heal well and allow a safe and early return to activity.

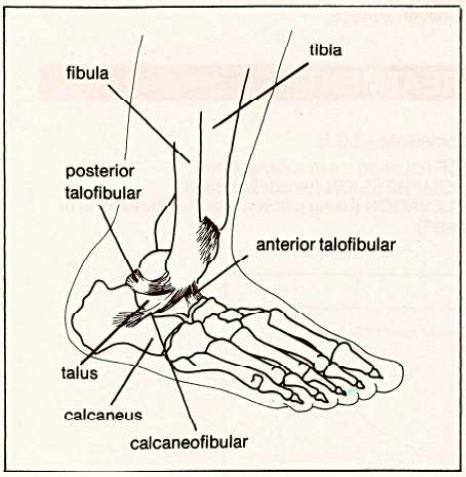
ANATOMY

The ankle joint is formed by the tibia (shin bone), the fibula, the talus and the calcaneus.

On the inside of the ankle, the joint is stabilised by a thick, strong fibrous ligament, the deltoid ligament. Sprains to this ligament (known as eversion sprains) account for less than 20% of ankle sprains.

On the outside of the ankle, the joint is stabilised by 3 ligaments, the anterior talofibular (at the front), the calcaneofibular (at the side) and the posterior talofibular (at the back).

Sprains to this side of the foot account for more than 80% of all ankle sprains, as the range of movement for inversion (turning of the foot) is greater than for eversion. This is due to the anatomy of the foot, the laxer ligaments and the fibular extending farther than the tibia.

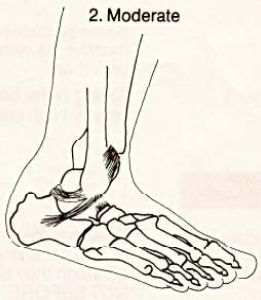


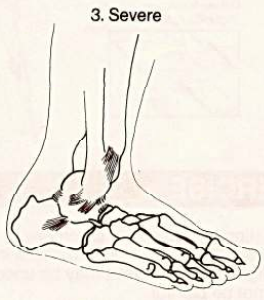
PATHOLOGY

Sprains can be classified into degrees of injury, first degree being mild, second degree being moderate and the third degree being severe.

DEGREE	EXTENT	TREATMENT	PROGNOSIS
1st	Mild tearing and stretching of ligaments	Immediate ice, compression, elevation for 1-2 days	Return to sport 3 days to 2-3 weeks
	Mild swelling, if any	Strengthen muscles	
	No instability	Balance exercises	
2nd	Partially torn ligaments	Immediate ice, compression, elevation for 2-3 days	3-6 weeks before return to full activity
	Involves injury to 1 or more of the ligaments	Crutches or cane	
	Swelling and bruising	Physiotherapy	
3rd	Complete rupture of 2 or more ligaments	Immediate ice, compression, and elevation. Continue for 2-3 days	Can be 8-12 months for ligaments to fully heal
	May involve a fracture		
	Swelling, bruising	X-ray	
	Pain on opposite side of sprain due to compression of tissue and bone	After 3 days continue compression during day Physiotherapy Surgery rarely required	


1. Mild


2. Moderate


3. Severe