



Figure 6-17. Compartments of the lower leg.

Table 6-4

Anatomical Structures of the Lower Leg Compartments

Lower Leg Compartment	Muscle	Nerve	Vascular
Anterior	Tibialis anterior Extensor hallucis longus Extensor digitorum longus Peroneus tertius	Deep peroneal	Anterior tibial artery
Lateral	Peroneus longus Peroneus brevis	Superficial peroneal, proximal portion of deep peroneal	Peroneal artery
Superficial posterior	Gastrocnemius Soleus Plantaris	Tibial nerve branches	Posterior tibial artery, peroneal artery, popliteal artery, sural arteries
Deep posterior	Flexor hallucis longus Flexor digitorum longus Tibialis posterior	Tibial	Posterior tibial artery, peroneal artery

INJURIES TO THE ANKLE AND FOOT

Fractures and Injuries to Bone

The ankle and foot may be fractured from injury mechanisms similar to those found with ankle sprains. The same MOI that may produce a sprain to the lateral ankle ligaments can also cause a fracture to the medial malleolus (distal tibia). Likewise, an eversion mechanism can cause a sprain to the medial ligaments or a possible fracture to the lateral malleolus (distal fibula) (Figures 6-18 and 6-19). Avulsion fractures in the ankle take place when a piece of

bone is pulled off with the ligament. Avulsion fractures can also occur at the insertion location of a tendon such as peroneal tendon insertion at the base of the fifth metatarsal. The distal fibula and tibia may also be fractured when inversion or eversion mechanisms of injury are combined with rotation. In addition, spiral fractures to the fibula are a common injury with the inversion and rotation MOI. For these reasons, all second- and third-degree ankle sprains, or any ankle sprain with persistent pain should have a radiograph.

There are some fractures that are specific to the foot. A Jones fracture is a fracture at the proximal third of the fifth metatarsal of the foot.³ Sir Robert Jones identified the Jones fracture in the early 1900s. In fact, Jones sustained this very