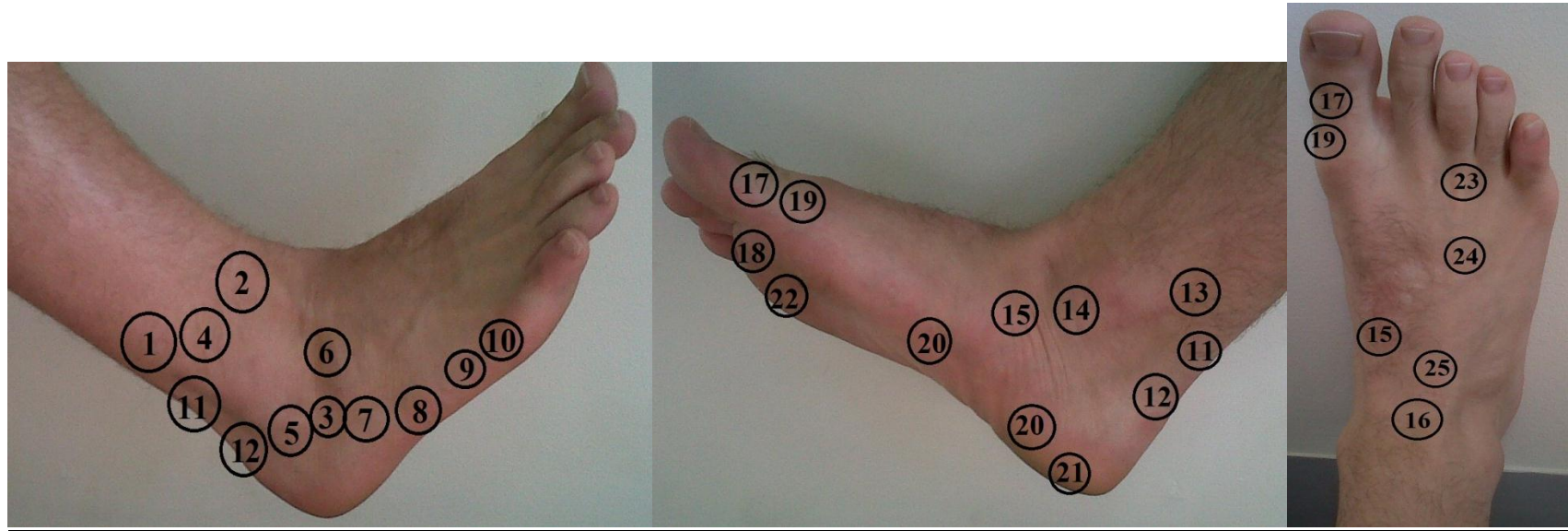


FOOT, ANKLE and LEG PAIN



<u>Area of Pain</u>	<u>Structures</u>	<u>Acute Traumatic Injury</u>	<u>Chronic Overuse</u>
1	Peroneus Longus and Brevis Tendons and Sural nerve	Contusion of the Structures	Peroneal Tendonitis
2	Anterior Tibiofibular ligament	Sprained ligament, damaged interosseous membrane.	Scar Tissue from previous ankle sprains
3	Anterior Talofibular ligament	Inversion ankle sprain	Scar tissue from previous ankle sprains
4	Peroneous Tertius muscle, Extensor tendons, superficial Peroneal nerve.	Contusion of the structures.	Peroneous Tertius or extensor tendonitis
5	Calcaneofibular ligament, peroneal tendons and retinaculum.	Inversion ankle sprain with possible torn ligament or retinaculum.	Snapping peroneal tendons due to weak retinaculum ligament.
6	Extensor Digitorum Brevis muscle, distal calcaneus, bifurcate ligament.	Bifurcate ligament rupture, avulsion fracture of distal calcaneus.	Strain Extensor Digitorum Brevis muscle.
7	Cuboid bone	Cuboid subluxation	Cuboid syndrome
8	Base of 5 th metatarsal, Peroneus Brevis muscle insertion.	Avulsion fracture of peroneus brevis, Jones Fracture (Inversion sprain)	Iselins disease (apophysitis), insertional tendonitis.
9	Metatarsal bone shaft	Metatarsal fracture	Stress fracture
10	5 th Metatarsalphalangeal joint	Fracture of Phalange	Tailors bunion
11	Achilles tendon	Achilles tendon rupture	Achilles tendonitis
12	Subcutaneous and Retrocalcaneus bursa	Bursitis	Chronic bursitis

13	Tibialis posterior tendon, Posterior Tibial nerve.	Ruptured Tibialis Posterior tendon.	Tibialis Posterior Tendonitis, Posterior Tibial nerve compression.
14	Deltoid ligament	Eversion ankle sprain	Ligament sprain from overpronation
15	Navicular bone Tubercle	Secondary to eversion sprain, subluxation.	Subluxation, secondary navicular-tarsal coalition.
16	Tibialis Anterior tendon	Strained tendon from plantarflexion injury	Tendonitis
17	Dorsal 1 st Metatarsalphalangeal joint	Turf Toe/ Sand toe due to hyperextension or hyperflexion injury to the joint capsule.	Hallux Rigidis
18	Sesamoid bones	Sesamoid fracture, Sesamoiditis	Sesamoiditis
19	Lateral aspect of 1 st metatarsalphalangeal joint.	Joint capsule sprain	Gout, bunion due to Hallux Valgus.
20	Plantar Fascia	Plantar Fascia rupture	Plantar fasciitis
21	Calcaneus, fat pad	Calcaneal fracture	Fat Pad Syndrome or inflammation associated with Rheumatoid Arthritis or Reiter's syndrome.
22	Metatarsal bone heads	Metatarsal subluxation	Morton's Neuroma, subluxation.
23	Interdigital space	Interdigital neuritis	Interdigital neuritis
24	Metatarsal bone, extensor tendons	Metatarsal fractures, subluxations.	Stress fracture tendonitis.
25	Extensor Retinaculum, joint capsule, Talus bone.	Joint capsule sprain, talar subluxation, retinaculum sprain.	Joint capsule sprain, Talar bone subluxation, Retinaculum sprain.

LOWER LEG PAIN

<u>Condition</u>	<u>Causes</u>	<u>Symptoms</u>
Shin Splints	<p>May be a tendonitis, periostitis, muscle or interosseous membrane strain. 2 types:</p> <ul style="list-style-type: none"> • <u>Anterior shin splints</u>- involves Tibialis anterior, extensor hallicus longus/ digitorum longus muscles. • <u>Posterior shin splints</u>-involves the Tibialis posterior, flexor hallicus longus/ digitorum longus or Soleus muscles. Usually strained due to hyperpronation. 	Anterior (front) or posterior (back) leg pain with insidious onset. Patient may have history of walking or running on a hard surface. Pain is a deep ache worse on standing up.
Tibial Stress Fractures	Chronic overuse from running or prolonged activity on hard surfaces compromising the bones remodelling (self-healing) ability thus making it weak. Risk factors include high foot arches, forefoot varus and leg length inequalities.	Active individuals with insidious onset of tibial pain.

Intermittent Claudication	Peripheral Vascular Disease due to Atherosclerosis which reduces the blood supply to muscles.	Usually an older patient with leg pain after walking for a few minutes must stop and rest before continuing. Cramping, tightening or tiredness in the legs. There may cardiovascular risk factors.
Compartment Syndrome	<p>There are four lower leg compartments:</p> <ul style="list-style-type: none"> • <u>Anterior (front)</u>- tibial artery and vein, tibialis anterior, toe extensor muscles and deep peroneal nerve. • <u>Deep posterior (back)</u>- tibialis posterior and toe flexor muscles, posterior tibial artery and vein. • <u>Superficial posterior (back)</u>-soleus, gastrocnemius and plantaris muscles • <u>Lateral</u>-peroneal muscles and nerve. <p>Increased pressure in any of these compartments will affect the related structures. Increased pressure may be exercise induced but may also be due to local trauma or fracture.</p>	Aching and cramping in the leg following exercise. Pain is relieved by rest initially. Pain and numbness in various parts of the foot.