Glossary of Foot & Ankle Terminology

Achilles Tendon – One of the longer tendons in the body, stretching from the bones of the heel to the calf muscles.

Abrasion – An injury in which superficial layers of the skin are scraped or rubbed away.

Abscess – A collection of pus usually formed because of a bacterial infection or foreign object becomes trapped in your body. When your body fights an infection or tries to destroy a foreign object trapped inside, white blood cells surround the object and the resulting fluid is called pus.

Abduction – The movement of a limb away from the midline of the body.

Adduction – The movement of a limb toward the midline of the body.

Anterior – Front or forward vs Posterior meaning towards the back.

Articulation – Place of union between 2 or more bones also known as a joint.

Aseptic (Sterile) Technique – A set of specific procedures and practices so as to minimize, avoid and exclude pathogenic (disease causing organisms) and contamination.

Avulsion (nail) - Excision of the body of the nail plate from its primary attachments.

Accommodation (shoe) – A temporary device consisting of layers of felt and padding affixed to the bottom of the shoe to adjust and alleviate a biomechanical structural problem, foot imbalance or other pathological foot condition.

Bilateral – A directional term relating to both sides.

Bone Scan - A nuclear imaging test that helps diagnose and track several types of bone disease.

Bunion – An inflammatory swelling over the 1st metatarsal phalangeal joint (MPJ) usually associated with hallux valgus (a lateral deviation of the joint at the base of the great toe resulting in an abnormal enlargement of the joint at the base of the great toe resulting in the formation of a bunion).

Bunionectomy - A surgical procedure (-ectomy) to remove the bunion to realign the big toe (hallux). Surgery may involve bone cutting -otomy as in a procedure known as an osteotomy. There are many different types of bunion surgeries including the Keller, Silver, McBride and Austin procedures.

Bunionette (Tailor’s Bunion) - A painful swelling or lump where the 5th digit (little toe) meets the foot. There may be a spur on the outside of the joint, or it may be related to the 5th toe joint becoming angled.
Bursitis – Inflammation of the bursa, a fibrous sac that acts as a cushion in areas subject to friction as in joints.

Calcaneus (Heel bone) – The largest of the tarsal bones, it forms the heel.

Calcaneal Exostosis (Heel Spur) – Bony growth projecting outward from the surface of the heel bone.

Callus (Tyloma) – A circumscribed hardening and thickening of the epidermis of the skin due to increased areas of pressure or structural abnormalities. See Hyperkeratosis.

Capsulitis – Inflammation of the capsule; the outermost layer of strong fibrous tissue that resembles a sleeve as it surrounds the joint.

Cartilage – Connective tissue that acts as a shock absorber between bones.

Cautery – Destruction of tissue by a burning agent (electrical, chemical, cold).

Cellulitis – An acute rapidly spreading inflammatory bacterial infection within the connective tissue often characterized by redness, pain, or larger or red streaks extending from the area of infection

Charcot Joint/ Charcot Foot – (Neuroarthropathy). A chronic, progressive and degenerative disease of one or more joints of the foot and ankle. A dislocation or fracture due to injury or trauma to the foot or ankle that results as undetected because of lack of normal sensation. The leading cause of Charcot joint disease is diabetes mellitus.

Corns (Heloma) - A local hardening and thickening of the epidermis of the skin due to increased areas of pressure or structural abnormalities. See Hyperkeratosis.
CT Scan - Also known as a computerized tomography scan, a CT scan is a special X-ray that uses X-ray images in conjunction with a computer to produce a series of two-dimensional pictures of the body. The CT scanner emits a series of thin X-ray beams that pass through the body at different angles.

Cuboid - The midfoot bone on the outside of the foot. This bone lies between the calcaneus and metatarsals.

Cuneiform – Wedge shaped bones in the midfoot.

Cyst – A sac containing liquid or semi-solid material.

Debridement – The removal of damaged tissue to prevent infection and promote healing.

Deformity – Deviation from normal form in size or shape.

Digit – Refers to the toes.

Dislocation – Displacement of a bone from its joint.

Distal – A directional term for away from the midline of the body; farthest away from the point of attachment.

Dorsal – A directional term relating to the top of the foot.

Dorsalis Pedis Pulse – Pulse found on the top (dorsum) of the foot.

Dorsiflexion – Turing of the foot or the toes upward toward the leg.
Ecchymosis (Bruise) – A large, irregular area of purplish discoloration due to bleeding under the skin.

Edema – Swelling caused by an abnormal accumulation of fluid in the cells, tissues or cavities of the body.

Erythema – Abnormal redness of the skin due to congestion of the small capillaries.

Excision – Removal, taking away or cutting out.

Eversion - Twisting out, away from the midline of the body.

Extensor Digitorum Longus - A muscle that raises the toes or ankle. The extensor digitorum longus stabilizes the toes against the ground in push-off and propulsion.

Extensor Hallucis Longus – A muscle that helps to stabilize the first metatarsophalangeal joint (where the toes meet the foot) and forefoot during push-off.

Extracorporeal Shock Wave Therapy - A technology using shock waves to treat chronic, painful conditions of the musculoskeletal system. A shock wave is an intense short energy wave traveling faster than the speed of sound. The word extra-corporeal means "outside the body" and refers to the fact that the shock waves are generated externally.

Fascia – A flexible band of connective tissue that envelopes, separates or binds together groups of muscles.

Fibula - The most prominent bone on the outer side of the ankle that also extends to the knee.

Fissure – A groove or crack-like break in the skin.
Flexible Cast – A semi-rigid support that splints the foot or a part of the foot made from layers of tape used to partially immobilize the area; a strapping.

Fracture - A broken bone.

Gait – Manner or pattern of movement of the limbs.

Gangrene – Decay of tissue caused by lack of circulation or when the blood supply is obstructed by disease or injury.

Gout (Gouty Arthropathy) – A metabolic disorder characterized by excessive uric acid in the blood and deposits of uric acid salts in the tissues surrounding the joints.

Hallux – Great toe

Hallux Rigidus – Flexion deformity of the great toe where there is limitation of motion.

Hallux Valgus – A lateral deviation of the joint at the base of the great toe resulting in an abnormal enlargement of the joint at the base of the great toe (bunion).

Hammertoe – Flexion deformity of a lesser toe usually resulting in a fixed position where toe is bent upward at the middle joint.

Hematoma (Subungal) – A swelling of clotted blood trapped in the tissues in the area under the toenail.

Hyperkeratosis (Callus/Corn) – A diffuse thickening of the skin that occurs in areas of friction, irritation, or continuous application of pressure, underlying bony abnormalities, mechanical stresses or abnormal biomechanics.

Inversion - Twisting in toward the midline of the body.

Kinesio Taping – Also known as neuro-muscular taping, a taping technique that uses an elastic therapeutic tape applied over muscles to reduce pain and inflammation and for support. It is non-restrictive type of taping which allows for full range of motion and has been used to treat joint dysfunction and muscle disorders.

Laceration – A torn or jagged wound or an accidental cut wound.

Lateral – A directional term for toward or nearer to the side of the body, away from the midline

Lateral Malleolus - Bony prominence at the end of the fibula, the most prominent bone on the outer side of the ankle.
Lesion – A pathological change of the tissues due to disease or injury.

Ligament - A band of connective tissue that connects one bone to another or by joining a bone to cartilage.

Lisfranc - The ligament between the medial cuneiform and the base of the second metatarsal. Lisfranc injury is important because rupture can lead to significant arthritis of the midfoot.

MRI (MR) - Also called magnetic resonance imaging, MRI is a type of imaging study that produces a three-dimensional picture showing soft tissues and bones. Ligaments, tendons, cartilage and muscles are shown and certain biologic conditions such as infection, avascular necrosis and bone bruises can be seen.

Medial Malleolus – Bony prominence at the end of the tibia, the most prominent bone on the inner side of the ankle.

Metatarsals – The 5 long bones (one for each digit), that connect the phalanges to the tarsals.

Metatarsalgia - Pain under the ball of the foot.
Metatarsophalangeal Joint (MPJ) (MTP) - The joint where the toes meet the foot. Also known as the “big toe joint”.

Midfoot - Refers to the section of the foot in front of the ankle referred to as the arch and includes five articulating bones of the tarsus: the cuboid, the navicular bone, and three cuneiform bones. It may also refer to any muscles that attach along these irregularly shaped bones, the tendons and ligaments connecting these structures, and the joints between the bones. The term midfoot is often used to collectively refer to all of these structures when describing an injury to the region.

Morton’s Neuroma – A mass or tumor growing from a nerve usually consisting of nerve fibers caused by compression of a branch of the plantar nerve between the heads of the metatarsal bones.
Navicular – The navicular bone is located at the top of the foot in close proximity to where foot and ankle meet; the navicular plays an important role in maintaining the medial longitudinal arch of the foot.

Onych/o – The word root/combining form for nail.

Onychocryptosis – A nail deformity when the edges of a toenail curve inward and cut into the skin. The affected area is prone to inflammation and infection.

Onychomycosis – A fungal infection of the nail that results in thickening, discoloration and roughness of the nail.

Oste/o – The word root/combining form for bone.

Osteomyelitis - Inflammation of the bone marrow and adjacent bone.

Overuse Syndrome – A condition in which the functional demands of an activity or sport exceed the physical ability of the individual resulting in a stress reaction at the weakest point of the structure.

Palliative – Treatment that offers comfort or relief alleviating pain and symptoms without eliminating the cause nor offering a cure.

Paronychia – An acute or chronic infection of the skin fold around the nail.

Pathological Fracture – Occurs when a weakened bone breaks under normal strain.

Periostitis – Inflammation of the periosteum, the outermost membrane covering the bone.
Peroneal – Pertaining to the fibula or outer side of the leg. The peroneal tendons are behind the outside bone of the ankle (the fibula) and balance the ankle and the back of the foot and prevent the foot from turning inwards repetitively.

Phalanges – Bones of the toes. Singular phalanx.

Plantar – The aspect of the foot that relates to the sole of the foot.

Plantar Fascia - Plantar fascia is a thin layer of tough tissue supporting the arch of the foot.

Plantar Fasciitis (Plantar Fascitis) - An inflammation of the plantar fascia on the bottom of the foot in the area of its attachment to the calcaneus.

Posterior Tibial Tendon - The posterior tibial tendon and other supportive ligaments help maintain the arch of the foot. This tendon goes behind the ankle and around a bone inside the ankle called the medial malleolus.
Prescription Foot Orthotic – A biomechanical insert custom-made according to a physician’s prescription to control and compensate for a structural abnormality or abnormal motion. Functional orthotics are usually made of a semi-rigid material such as composite plastics or graphite. Accommodative orthotics are softer and meant to provide additional cushioning and support. They can be used to treat diabetic ulcers.

Pronation – An outward rolling of the heel and flattening of the arch producing foot strain and many chronic deformities. Normally when you walk, your foot lands on the outer side of the heel first. Your weight then passes along the inner edge of the sole (normal pronation) and then back to the outside of the foot. In excessive pronation, the body weight stays on the inner edge of the sole.

Proximal – A directional term for nearest to the midline or point of attachment or beginning of a body structure.

Sesamoiditis - Inflammation of the small bones under the great toe.

Sprain - An injury to a joint that usually involves a wretched or torn ligament. Sprains vary in severity and can range from a partial tearing of the ligament to a complete rupture.

Strain – An injury to a muscle or tendon in which the muscle fibers tear as a result of overstretching. A strain is also colloquially known as a pulled muscle.

Stress Fracture – An incomplete fracture caused by repeated stress to the bone also called a March fracture.

Subluxation – An incomplete or impartial dislocation.

Subungal – Under the nail plate.

Talus - The ankle bone; it articulates with the tibia and fibula.
Tarsals – The most proximal bones of the foot. There are 7 of these; the talus (ankle), calcaneus (heel), navicular, cuboid, 3 cuneiform bones.

Tendon – An elastic structure in the body that connects muscle to bone.

Tendonitis – An inflammation of the tendons caused by excessive or unusual use of a joint.

Tenosynovitis – An inflammation of the sheath that surrounds the tendon.

Tibia - The larger, medial bone of the leg that extends from the knee to the ankle.

Tibialis Anterior Tendon - The function of the tibialis anterior is to move the ankle upward. It stabilizes the foot in the latter part of the stance phase of gait.

Trauma – Wound or injury.

Triage – The medical screening of patients to determine their relative priority of need and the proper type of treatment and scheduling.
**Tuberosity** - A projection or protuberance, especially one at the end of a bone for the attachment of a muscle or tendon.

**Ulcer** – An open lesion or sore on the skin characterized by disintegration and necrosis of the tissue.

**Valgus** – An abnormal fixed position in which the foot or part is turned outward or away from the midline of the body.

**Varus** – An abnormal fixed position in which the foot or part is turned inward or toward the midline of the body.

**Verrucae Plantaris (Plantar’s Wart)** – A wart on the bottom of the foot caused by a virus.