Tibialis anterior

Tibialis anterior

Ask the patient to walk on their heels with their feet inverted; the tibialis anterior tendon can be seen. With the patient’s feet resting over the edge of the couch, ask the patient to actively dorsiflex and invert their foot to reach your hand. Palpate the tibialis anterior muscle. - .

(b) (c) Figure 35.40 (a) Flat foot appearance with a reduced medial longitu

dinal arch; (b) windlass test; (c) Jack’s test. Figure 35.41 Anterior draw test.

Pathology of the tibialis posterior typically presents with posteromedial ankle pain, swelling and gradual onset of a flat foot. When assessing the tendon, look for swelling along its course, a flat foot with heel valgus, the ‘too many toes’ sign and prominence of the talar head. Palpate for tenderness, swelling or gaps in the tendon. /uni25CF T o test integrity , ask the patient to perform a single-foot tiptoe test on both sides. The inability to lift the a ff ected heel o ff the ground is suggestive of a tibialis posterior tendon injury or insu ffi ciency . /uni25CF T o test strength , position the foot in the plantarflexed and inverted position. Ask the patient to hold this position while you push against their foot. Dorsiflexors Tendinitis of the long toe dorsiflexors usually presents in athletes. Pain a ff ects gait in the early contact phase. Palpate for swelling, gaps or any tenderness. Ask the patient to move the foot into dorsiflexion and to hold this position while you push the foot down. Inability to dorsiflex the foot is referred to as foot drop. Causes include stroke, spinal injury , spinal stenosis or disc pro lapse, peripheral nerve injury (e.g. sciatic, common and deep peroneal) or a peripheral neuropath y . Peroneal tendons Peroneal tendon pathology presents with swelling and/or pain of the lateral hindfoot or midfoot. There may be a history of the ankle ‘giving way’. Presentations of peroneal tendon pathology include: /uni25CF ‘peroneal spasm’ : may be seen in tarsal coalition; here, the muscles are usually contracted secondary to the hindfoot valgus; /uni25CF peroneal tendon dislocation : attempt to dislocate the tendons by dorsiflexing and everting the foot. The peroneus longus may be palpated just before it crosses under the foot to insert onto the base of the first metatarsal. Ask the patient to plantar flex the first metatarsal. Test strength and integrity by active and resisted e version while you palpate the tendons for swelling, tenderness or gaps. Morton’s neuroma This condition represents thickening of the tissue that surrounds the digital nerve leading to the toes as the nerve passes under Thomas George Morton ,

1835–1903, surgeon, Pennsylvania Hospital, Philadelphia, PA, USA. Jacob D Mulder , 1901–1965, Dutch surgeon and podiatrist. most frequent between the third and fourth toes. A neuroma presents with burning pain in the ball of the foot that radiates to the involv ed toes. The condition is di ffi cult to diagnose and requires a high index of suspicion. Palpate in the web space between the symptomatic toes for a mass. Compression of the metatarsals may elicit a ‘click’ between the bones (Mulder’s click). Summary box 35.12 Ankle and foot examination /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF - /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF

Inspection of the standing patient Front – alignment, foot shape and deformity Side – medial arch Back – heel position Gait – antalgic, high-stepping gait (foot drop) Inspection of the supine patient Skin, scars, soft tissues, bony deformity Palpation of the ankle, subtalar, midfoot and forefoot joints Movements Dorsi /f_l exion, plantar /f_l exion, inversion, eversion Special tests Flexibility of the subtalar joint and a /f_l at foot Joint stability, Morton’s neuroma Tendons – tibialis posterior and anterior, Achilles tendon, peroneals and dorsi /f_l exors

Tibialis anterior

Ask the patient to walk on their heels with their feet inverted; the tibialis anterior tendon can be seen. With the patient’s feet resting over the edge of the couch, ask the patient to actively dorsiflex and invert their foot to reach your hand. Palpate the tibialis anterior muscle. - .

(b) (c) Figure 35.40 (a) Flat foot appearance with a reduced medial longitu

dinal arch; (b) windlass test; (c) Jack’s test. Figure 35.41 Anterior draw test.

Pathology of the tibialis posterior typically presents with posteromedial ankle pain, swelling and gradual onset of a flat foot. When assessing the tendon, look for swelling along its course, a flat foot with heel valgus, the ‘too many toes’ sign and prominence of the talar head. Palpate for tenderness, swelling or gaps in the tendon. /uni25CF T o test integrity , ask the patient to perform a single-foot tiptoe test on both sides. The inability to lift the a ff ected heel o ff the ground is suggestive of a tibialis posterior tendon injury or insu ffi ciency . /uni25CF T o test strength , position the foot in the plantarflexed and inverted position. Ask the patient to hold this position while you push against their foot. Dorsiflexors Tendinitis of the long toe dorsiflexors usually presents in athletes. Pain a ff ects gait in the early contact phase. Palpate for swelling, gaps or any tenderness. Ask the patient to move the foot into dorsiflexion and to hold this position while you push the foot down. Inability to dorsiflex the foot is referred to as foot drop. Causes include stroke, spinal injury , spinal stenosis or disc pro lapse, peripheral nerve injury (e.g. sciatic, common and

deep peroneal) or a peripheral neuropath y . Peroneal tendons Peroneal tendon pathology presents with swelling and/or pain of the lateral hindfoot or midfoot. There may be a history of the ankle ‘giving way’. Presentations of peroneal tendon pathology include: /uni25CF ‘peroneal spasm’ : may be seen in tarsal coalition; here, the muscles are usually contracted secondary to the hindfoot valgus; /uni25CF peroneal tendon dislocation : attempt to dislocate the tendons by dorsiflexing and everting the foot. The peroneus longus may be palpated just before it crosses under the foot to insert onto the base of the first metatarsal. Ask the patient to plantar flex the first metatarsal. Test strength and integrity by active and resisted e version while you palpate the tendons for swelling, tenderness or gaps. Morton’s neuroma This condition represents thickening of the tissue that surrounds the digital nerve leading to the toes as the nerve passes under Thomas George Morton , 1835–1903, surgeon, Pennsylvania Hospital, Philadelphia, PA, USA. Jacob D Mulder , 1901–1965, Dutch surgeon and podiatrist. most frequent between the third and fourth toes. A neuroma presents with burning pain in the ball of the foot that radiates to the involv ed toes. The condition is di ffi cult to diagnose and requires a high index of suspicion. Palpate in the web space between the symptomatic toes for a mass. Compression of the metatarsals may elicit a ‘click’ between the bones (Mulder’s click). Summary box 35.12 Ankle and foot examination /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF - /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF

Inspection of the standing patient Front – alignment, foot shape and deformity Side – medial arch Back – heel position Gait – antalgic, high-stepping gait (foot drop) Inspection of the supine patient Skin, scars, soft tissues, bony deformity Palpation of the ankle, subtalar, midfoot and forefoot joints Movements Dorsi /f_l exion, plantar /f_l exion, inversion, eversion Special tests Flexibility of the subtalar joint and a /f_l at foot Joint stability, Morton’s neuroma Tendons – tibialis posterior and anterior, Achilles tendon, peroneals and dorsi /f_l exors

---

Revision #1
Created 2025-12-31 15:14:32 UTC by Omar Ayman
Updated 2025-12-31 15:14:32 UTC by Omar Ayman