



Checklist for Clinical Examination of the Leg, Ankle, and Foot

History

Ask questions pertaining to the following:

- ☐ Chief complaint
- ☐ Mechanism of injury
- ☐ Unusual sounds or sensations
- ☐ Type and location of pain or symptoms
- ☐ Previous injury
- ☐ Previous injury to opposite extremity for bilateral comparison

If chronic, ascertain the following:

- ☐ Onset and duration of symptoms
- ☐ Aggravating and easing factors
- ☐ Training history (change in practice intensity, duration, frequency, training surface, footwear, orthotics)

Observation

- ☐ Swelling, deformity, abnormal contours, discoloration, scars, calluses, blisters, exostosis
- ☐ Gait, weight bearing, ankle motion
- ☐ Overall position, posture, and alignment of foot, ankle, and lower extremity
- ☐ Muscle development—are there areas of muscular atrophy?
- ☐ Inspect shoes bilaterally for abnormal, uneven, or excessive wear.
- ☐ Bilateral comparison

Differential Diagnosis

- ☐ Rule out low back, hip, and knee with active ROM and overpressure tests.

Range of Motion

- ☐ Active ROM for ankle plantar flexion, dorsiflexion, inversion, and eversion, and toe flexion and extension
- ☐ Passive ROM for plantar flexion, dorsiflexion, hindfoot inversion and eversion, forefoot inversion and eversion, and toe flexion and extension
- ☐ Bilateral comparison

Strength Tests

- ☐ Perform manual resistance against the same motions as in active ROM.
- ☐ Check bilaterally and note any pain or weakness.

Neurovascular Tests

- ☐ Sensory over anterior thigh (L2, L3), antero-medial leg (L3, L4), lateral leg and dorsum of foot (L5), lateral side and plantar surface of foot (S1), and medial heel (S2)
- ☐ Peripheral sensory examination over dorsal web space (deep peroneal), dorsum of foot and lateral leg (superficial peroneal), and posteromedial plantar heel (posterior tibial)
- ☐ Examination of myotomes with ankle dorsiflexion (L4), great toe extension (L5), ankle plantar flexion and eversion (S1), and great toe flexion (S2)
- ☐ Peripheral motor examination with ankle dorsiflexion (deep peroneal) and plantar flexion and toe flexion (posterior tibial) and eversion (superficial peroneal)
- ☐ Reflex with Achilles tendon (S1, S2)

Special Tests

- ☐ Pott's compression test
- ☐ Thompson test
- ☐ Alignment tests (calcaneal–tibial, forefoot–hindfoot, Feiss line, navicular drop)
- ☐ Stress fracture tests (Morton's, percussion, Hoffa's)
- ☐ Neurovascular tests (Homans' sign, peripheral nerve testing for deep and superficial peroneal nerve compression, Tinel's, Morton's)
- ☐ Bilateral comparison

Joint Mobility Examination

- ☐ Distal tibiofibular (ventral and dorsal glides)
- ☐ Talocrural (distraction and glides)
- ☐ Subtalar (medial–lateral glides)
- ☐ Midtarsals (anteroposterior [AP] and posteroanterior [PA] glides)

(continued)

Checklist for Clinical Examination of the Leg, Ankle, and Foot *(continued)*

- ☐ Tarsometatarsals (AP glides)
- ☐ Metatarsophalangeal and interphalangeal (distraction, rotation, and AP and PA glides)

Palpation

Palpate for pain, tenderness, crepitus, defects, and deformity over the following:

- ☐ Tibial crest, anterior tibiofibular ligament, anterior dome of talus, anterior tibialis muscle and tendon, extensor digitorum and hallucis tendons, extensor digitorum brevis, dorsalis pedis pulse, cuneiforms, metatarsals, and phalanges
- ☐ Fibula, peroneal muscle and tendons, lateral malleolus, anterior and posterior talofibular ligaments, calcaneofibular liga-

ment, sinus tarsus, cuboid, and base of fifth metatarsal

- ☐ Gastrocnemius, soleus, Achilles tendon, and calcaneus
- ☐ Calcaneal tubercle and insertion of the plantar fascia, plantar fascia, metatarsal heads
- ☐ Tibial shaft, medial border of the tibia, medial malleolus, deltoid ligament, tibialis posterior tendon, flexor digitorum tendon, flexor hallucis longus tendon, posterior tibial artery and nerve, navicular tubercle, medial cuneiform, and first metatarsal (base, shaft, and head)

Functional Tests