

Foot and ankle examination

Objectives

To be able to perform examination of the foot and ankle and to distinguish and identify an abnormal finding that suggests pathology.

Examination

Look (weight bearing and none weight bearing)

Proper bilateral exposure, at least mid leg, compares Rt and Lt, front , side and back.

A. Alignment.

B. Deformity (hind foot: varus or valgus, mid foot: cavus, flat foot. Forefoot: HV)

C. Skin changes (callosities)

D. Swelling or mass

E. Muscle wasting (leg)

F. Gait:

Feel

A. Soft tissue: skin temperature, tenderness, Achilles tendon and planter fascia, medial and lateral collateral ligaments.

B. Bony prominences: first metatarsal head (OA. Bunion), fifth metatarsal base (tenderness-avulsion fracture), medial and lateral malleoli and calcaneal tuberosity

C. Joint line anteriorly

Move

Active and passive ankle ROM (dorsiflexion and planterflexion)

Passive subtalar ROM (ankle to neutral, and stabilized then apply inversion and eversion to assess subtalar ROM).

N.B: note if painful or painless

Do (special tests)

A. Anterior drawer test with ankle planterflexion to evaluate anterior talofibular ligament (8mm diff)

B. If pt has flat foot: you will ask the pt to tip toe to check if it is flexible or rigid flatfoot, you have to observe if the heel will correction from valgus to varus or not as well as mid foot arch reconstitution.

C. Achilles tendon test: Thompson test.

D. How to differentiate between Achilles tightness or only gastroc. Tightness, by dorsal flexion of ankle while the knee extended then flexed will help for spine session but not for ankle and foot itself)

Neuro-vascular examination