Live surgery - 5

Case: Adult acquired flat foot deformity left foot

• Procedure: Flat foot deformity correction left foot.



- Brief history complaints of left foot and ankle pain since 1.5 years
 - No history of trauma, no history of pain in other joints
 - No medical comorbidities

Clinical examination Left foot

- Inspection swelling + over medial side of mid foot
 - Forefoot in abduction
 - collapsed medial arch
 - hindfoot in valgus

- Palpation plantar flexion : 0 40°
- - Dorsiflexion : 0 20°
- Inversion& eversion: restricted and painful



FOREFOOT ABDUCTION

Left foot affected side



left foot affected side

COLLAPSED MEDIAL ARCH



CLINICAL VIDEOS





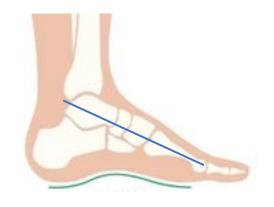
left foot affected side

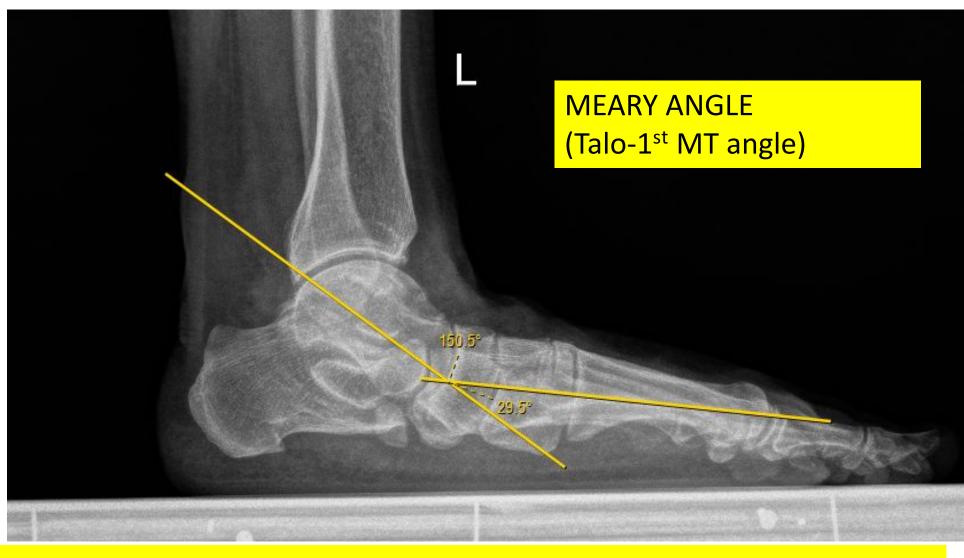




Radiograph measurements

NORMAL – O DEGREE (TO IDENTIFY APEX OF DEFORMITY IN PES PLANUS/PES CAVUS)





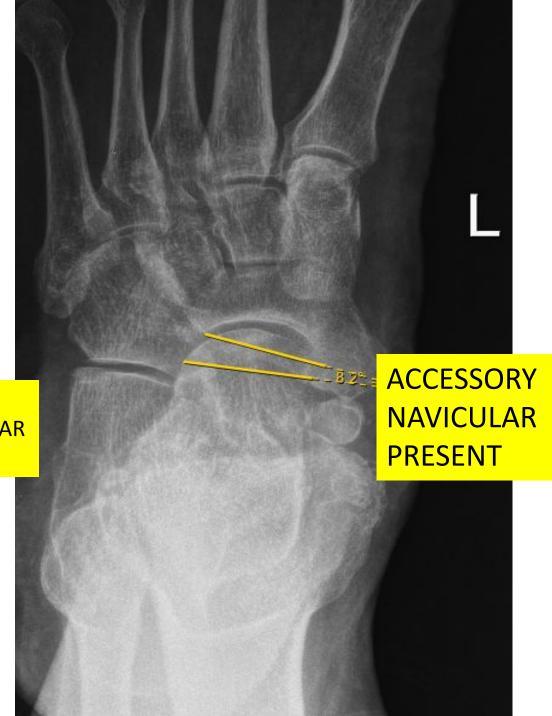
AFFECTED SIDE – 29.5° downward convexity signifies pes planus

TALONOVICULAR COVERAGE ANGLE

NORMAL < 7°



AFFECTED FOOT TALONOVICULAR COVERAGE ANGLE – 8.2° (DENOTES TALAR HEAD UNCOVERAGE)



Talo-1st MT angle AP view

 $NORMAL - 7^{\circ} + /- 4^{\circ}$

(TO ASSES MIDFOOT ABDUCTION/ADDUCTION)



AFFECTED SIDE -0.5°



AP TALO-CALCANEAL ANGLE

(FOR HINFOOT VALGUS)

NORMAL – MIDTALAR LINE PASSES THROUGH BASE OF 1 ST MT AND MIDCALCANEAL LINE PASSES THROUGH BASE OF 4TH METATARSAL

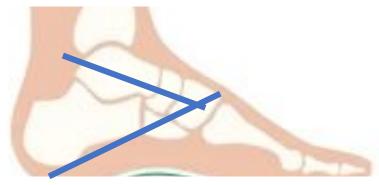


AFFECTED SIDE – MIDTALAR LINE PASSES THROUGH BASE OF 1ST MT AND MIDCALCANEAL LINE PASSES THROUGH BASE OF 4TH METATARSAL



LATERAL TALOCALCANEAL ANGLE

(TO ASSESS HINDFOOT VALGUS)



NORMAL - 25-40°

AFFECTED SIDE – 45.1°



CALCANEAL INCLINATION ANGLE

(REFLECTS THE HEIGHT OF FOOT FRAMEWORK- TA tightness)



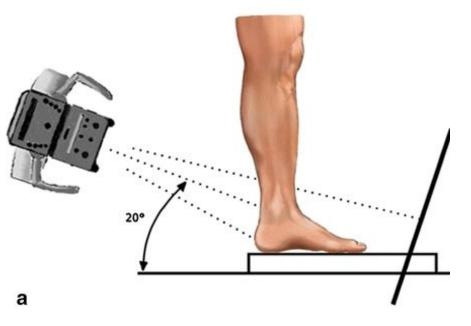
NORMAL – 10-25°

AFFECTED FOOT – 10°
(lower angle signifies TA tightness)



Saltzman's view

NORMAL HINDFOOT 2° – 6° OF VALGUS



R 169.2° AFFECTED HINDFOOT – 20.8⁰ VALGUS

Plan -

Surgeon: Dr Rajiv Shah

Moderators: Dr Rahul Upadhyay, Dr Girish Motwani

Case: Adult acquired flat foot deformity left foot

Procedure: Flat foot deformity correction left foot.
 (Gastro-soleus resection +/- Peroneus longus transfer + MCD-medial calcaneal displacement osteotomy+/- FDL transfer +/-Spring ligament bracing)

