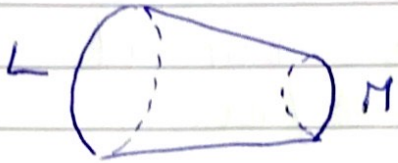


FOOT & ANKLE

Ankle

Talar dome ~~the~~ frustum of a cone, narrower Medially
Down & In



→ Plantar flexion → adduction

Dorsiflexion → Abduction of foot
up & out

Sub talar jt

Torque converter / Mitred hinge

ER of tibia → supination of forefoot

IR → pronation

Mid tarsal jt (Cheper jt) $\begin{matrix} \text{TN} \\ \text{CC} \end{matrix}$

Hind foot valgus → transverse tarsal jt parallel & supple
varus → transverse tarsal jt divergent & lock

Windlass mechanism

Plantar fascia inserts into proximal phalanx & calc
Passive dorsiflexion of MTP tightens PF (heel rise / toe off)
~~Results~~ Shortens distance from Calc to MTP joint

Accentuates longitudinal arch

Hind foot varus

Locks transverse tarsal jt

Total Ankle Replacement (TAR)

1° Gen - Two part constrained Failed at bone implant interface

- unconstrained cemented Relied on malleolus & lig stability

Cemented relied on bone resection failed because
migration & subsidence



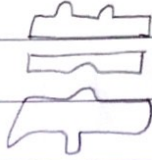
2° Gen 2 component uncemented, semi constrained

Agility required inferior fib-fib fusion

Failed due to non union & talar component loosening

STAR = Scandinavian TAR

3rd gen



3 component mobile bearing uncemented
↓ stress @ bone implant interface