RHEUMATOID ARTHRITIS

70-90% of rheumatoid have foot involvement

15% present initially with foot complaints.

Forefoot: 50% (28% Hallux valgus)

Hindfoot: 8-25% [Talo-Navicular joint is commonly involved]

Clinical

1.Hallus Valgus

2. Claw toe due to dorsal subluxation of Metatarsophalangeal joint

3. Lateral deviation of toes

4. Fat pad displacement over the sole; head of the metatarsal well felt in the ball of the foot

5. Intermetatarsal bursae: Morton's neuroma

6. Hindfoot Valgus

7. TPDS [Tibialis posterior dysfunction syndrome] 10%

8. Ankle erosions and arthritis and valgus deformity

9. Arthritis of any other joint

10. Tarsal tunnel syndrome

Check

Status of the skin

Vascular status

Check cervical spine and neurology

Which joint is the cause of pain

Medication history

X ray

Larsen's classification

I Soft tissue swelling and slight joint narrowing (25% of normal)

II Joint narrowing (25-75%) with erosions

III Serious erosions with narrowing >75%

IV Complete loss of joint space

Treatment

Medications

Proper foot wear: deep toe box

A longitudinal arch support

At times an ankle foot orthosis also is useful: when weakness

Stiffness can be helped by using a rocker bottom sole

Steroid injection

Physio

Timing of surgery

Always tackle most painful joint

In a patient with forefoot and hindfoot problem similar, it may be best to correct the hindfoot first.

Any Hip or knee problem: Tackle them first before foot surgery

Common surgeries

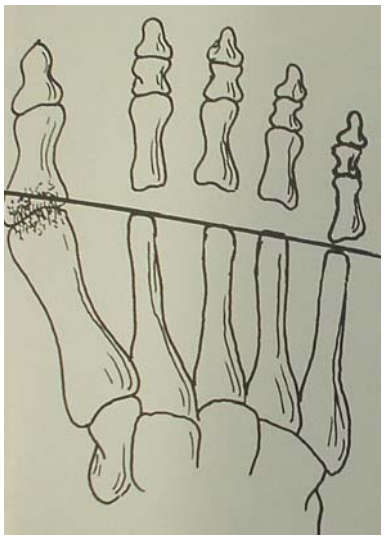
MANN'S FOREFOOT ARTHROPLASTY

Excision of Lateral 4 heads

Fusion of First Metatarsophalangeal joints in 30º dorsiflexion and 10º Valgus

Two dorsal longitudinal incisions in the II and IV inter-

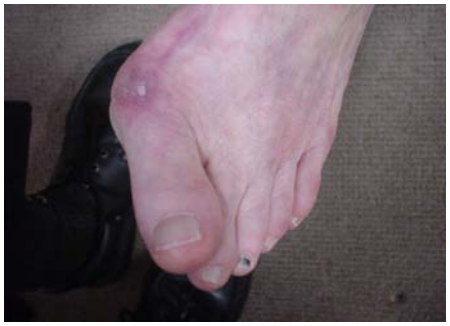
metatarsal spaces.

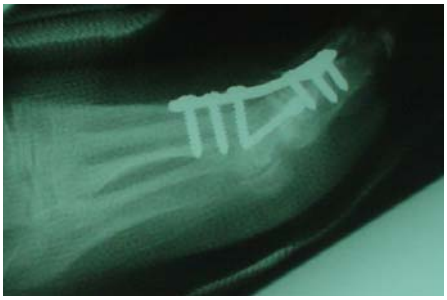


Release: collateral ligaments, Capsule, the plantar plate

Important aspect is adequate decompression at the Metatarsophalangeal joints by excising head of the lesser metatarsal head

The gap is 1 cm space between the base of the proximal phalanx and the osteotomised metatarsal surface





MIDFOOT

Talo-navicular joint is more commonly involved than the subtalar joint

Treatment: Fusion of this joint

When in addition, the subtalar joint stiff: Triple Arthrodesis

Use either two 4.5-mm screws placed as lag screws or one 6.5 mm screw

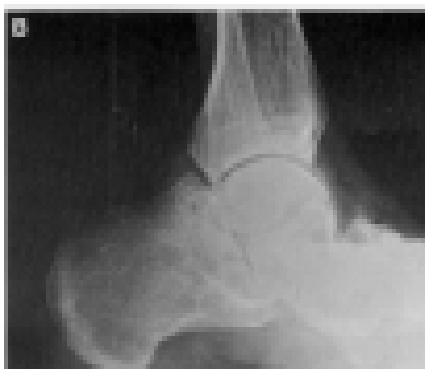
HINDFOOT

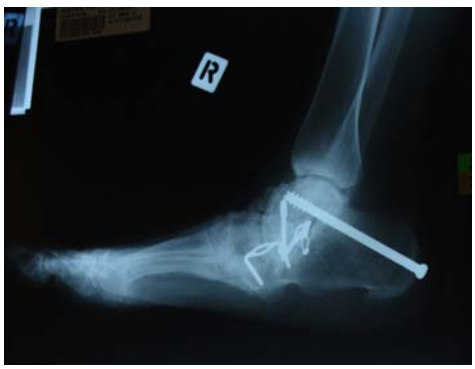
Synovectomy of tibialis posterior

Subtalar arthrodesis

Triple arthrodesis

Ankle arthrodesis

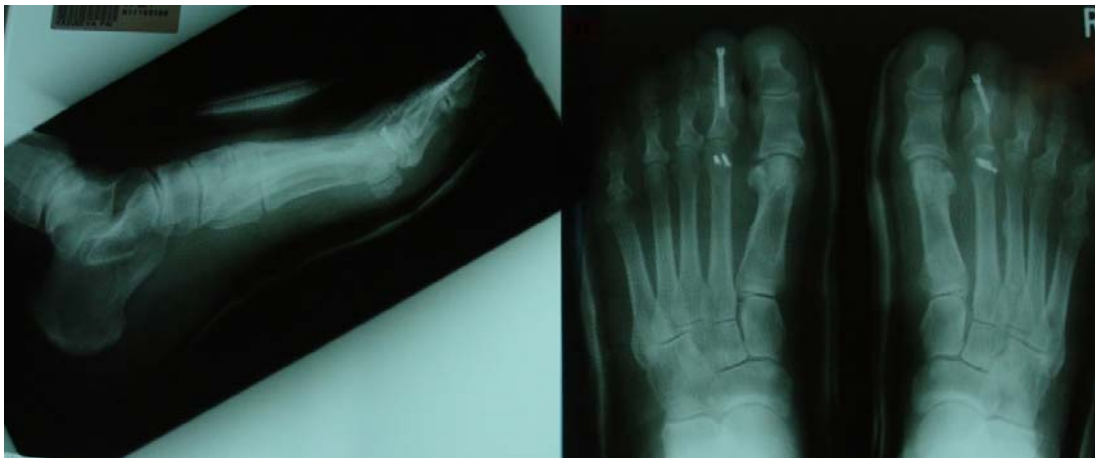




Non-union: common joint for non-union is talonavicular joint

After subtalar arthritis, 30% to 50% develop ankle arthritis.

6% of patients requiring ankle fusion .



ACUTE SESAMOID FRACTURE

D/D partite sesamoids: look for a sharp lin

A dorsiflexion views may show increase in separation of fragments.

CT scan may help.

Treatment

Below knee cast for 3 weeks, followed by a metatarsal bar.

Pain may persist for 4-6 months.

If symptomatic non-union, or chronic pain: consider excision of sesamoid or fragments, through medial or dorsal or plantar incision.

Never excise both sesamoids as this produces a cock up deformity

TURF TOE

Exaggerated dorsiflexion with valgus/ varus strain of METATRSOPHALANGEAL JOINTS joint

More common since artificial sports surfaces

Can range from sprains of the sesamoid complex to ruptures of the complex causing proximal or distal migration of the sesamoid bones to sesamoid complex to a fracture of the sesamoid and dislocation

Usually treated with below knee cast, but may need operative reduction and repair through medial approach