

POSTERIOR MALLEOLAR FRACTURE REDUCTION

Goals of Surgical Treatment

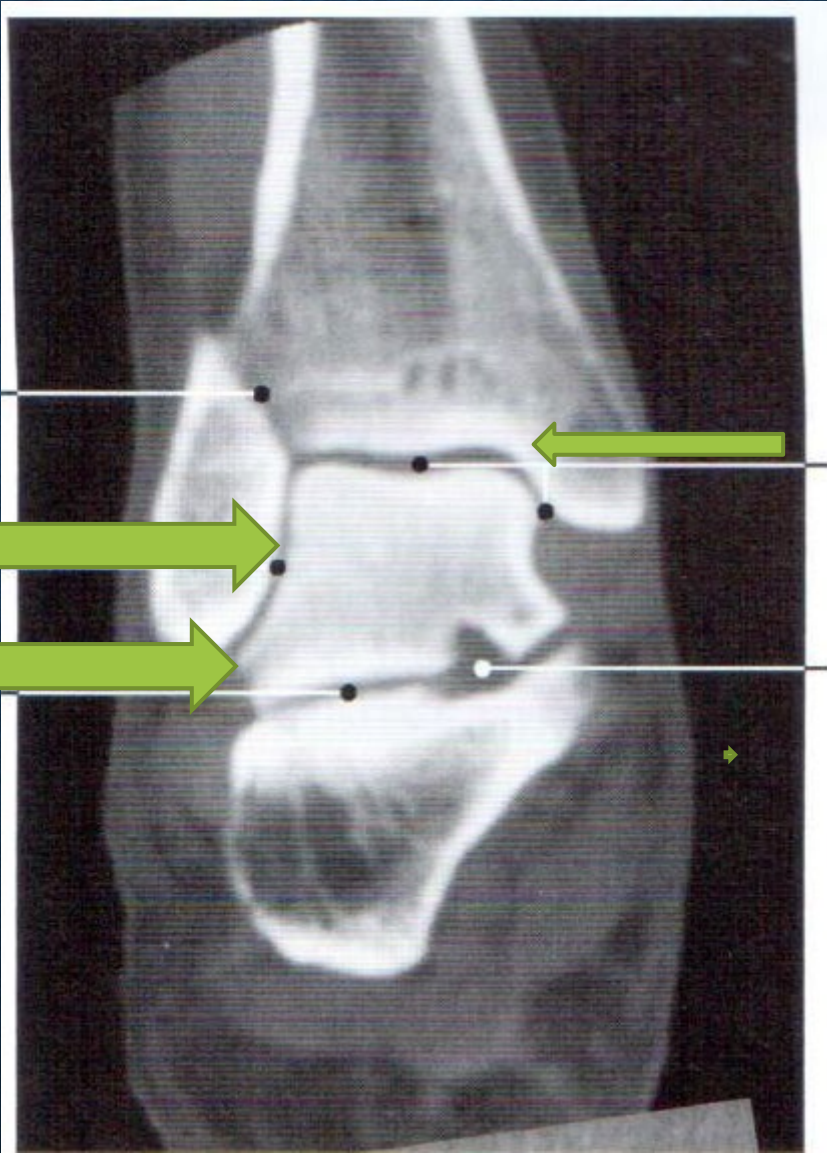
Shep Hurwitz, MD

No Conflicts to Report

DISPLACED ANKLE FRACTURES

- Medial and Lateral Malleoli confer considerable mechanical stability, as does the posterior malleolus
- Ligaments help with joint stability, as does the syndesmosis
- Early reduction and stabilization lead to better functional results
- Confounding elements of the injury include plafond damage, loose body formation, chondrolysis and posterior malleolus fracture





Axilla

Space

length

RETURN TO A NEAR ANATOMIC STATE

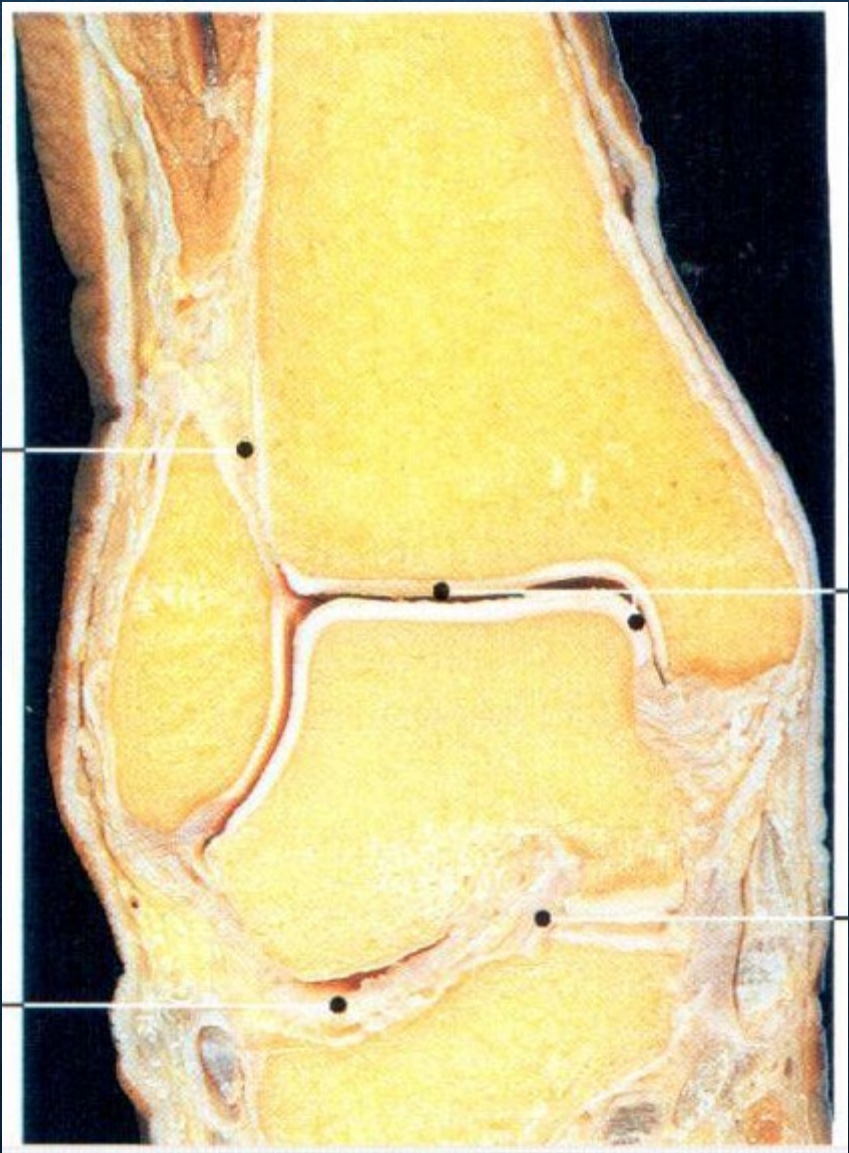
The posterior malleolus provides a buttress to posterior displacement of the talus and if not in suitable position is associated with a form of ankle instability

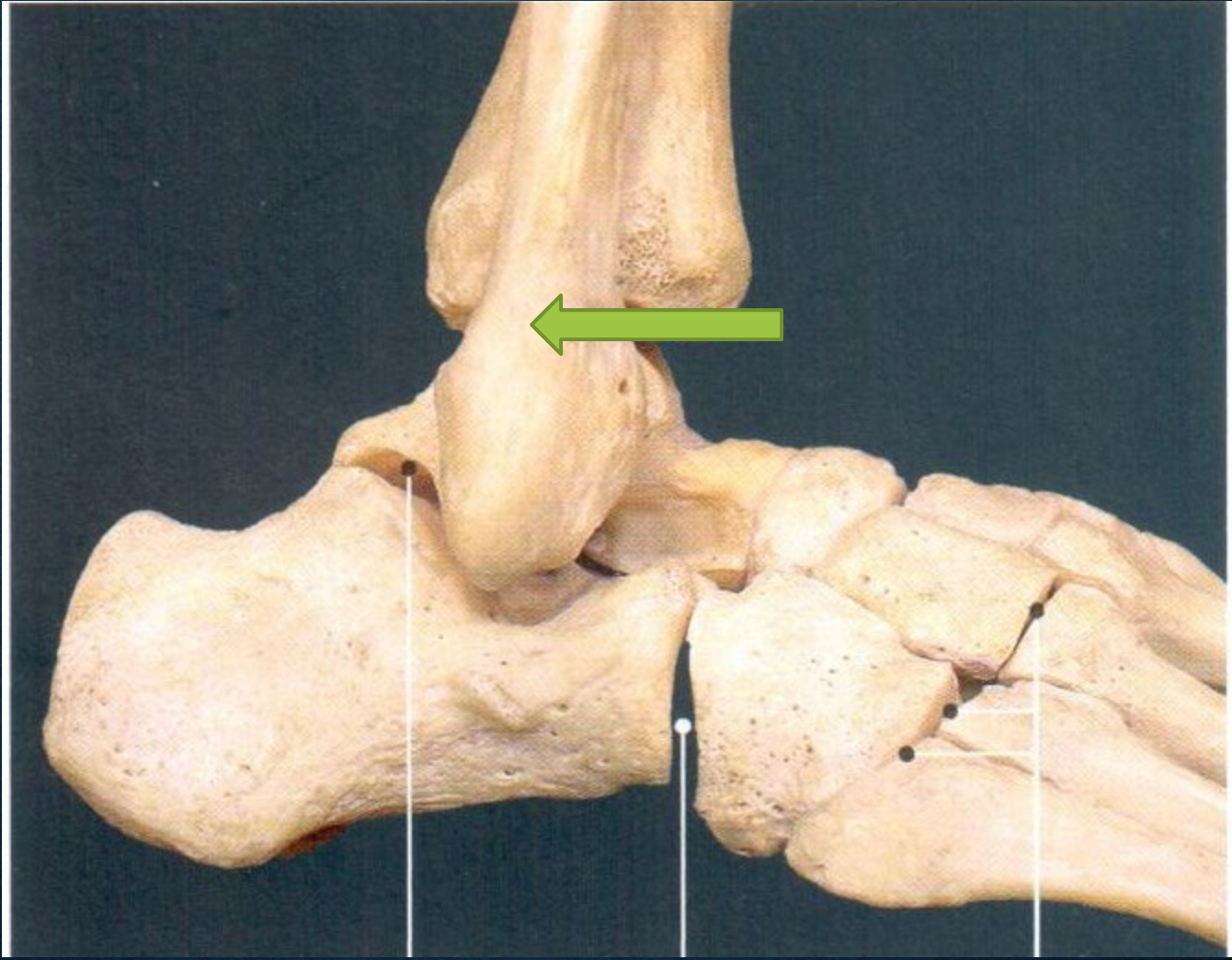
SURGICAL APPROACH

- The posterior malleolus can be exposed from a lateral or posterolateral approach any vantage point of the fixation since fluoro will be used to determine fibular length, lateral joint space and posterior malleolus reduction
- Some minimally displaced posterior malleolar fractures can be reduced with percutaneous manipulation and percutaneous screw fixation
- If plating the posterior fragment, then open exposure is needed

TIMING OF SURGERY

- Not critical to post treatment outcome
- Added difficulty if unrecognized or initial closed reduction goes on to displacement
- If too much time from injury then open reduction is necessary





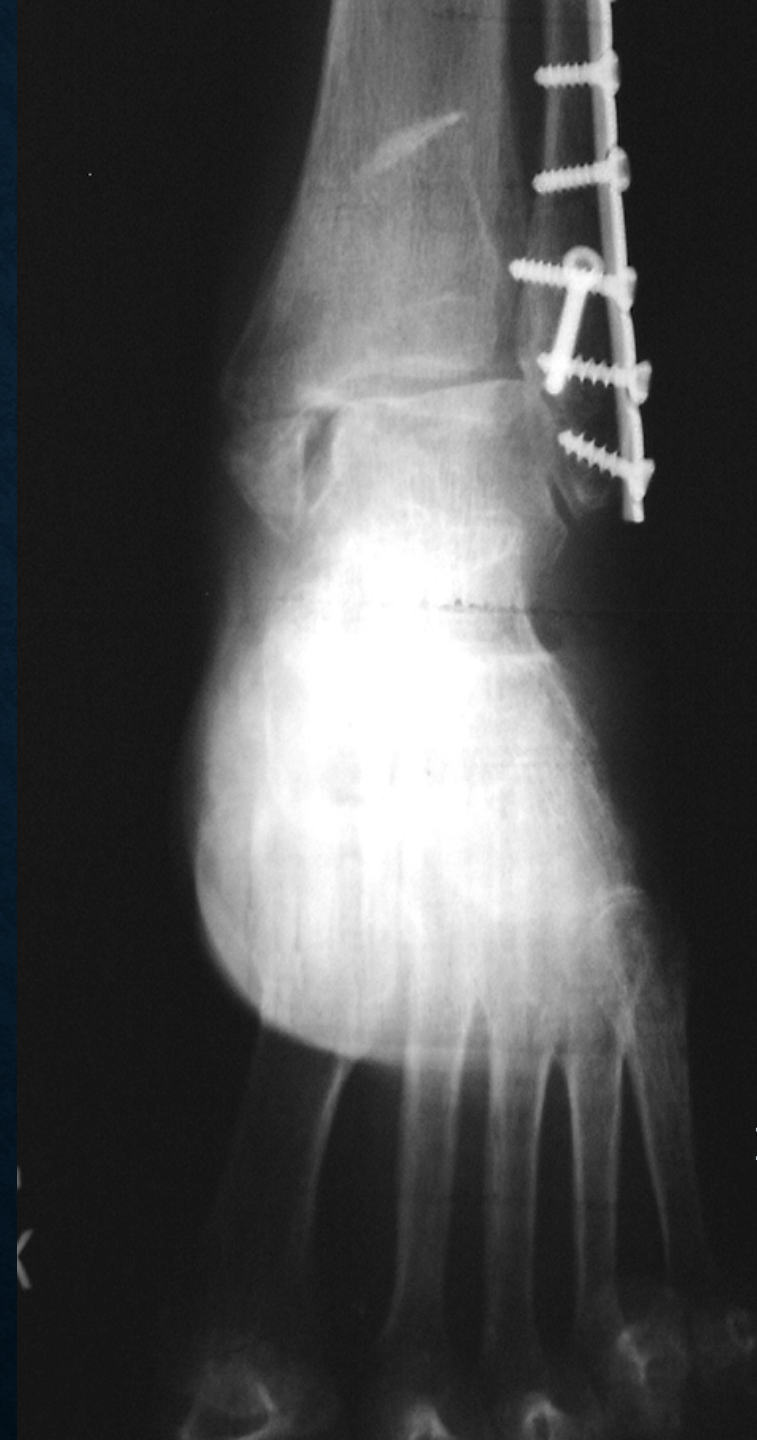
HOUSEKEEPING

Look for loose osteo-cartilaginous loose bodies

Check the syndesmosis manually and the location of the fibula
in the incisura

**IS FIXATION IMPORTANT- IS THERE AN
OPTIMUM CONSTRUCT?**

**>REDUCTION IS MOST IMPORTANT
>BUTRESSING LARGE FRAGMENTS IS
REASONABLE**



Not Good!

**ACCURATE ANATOMIC
REDUCTION DOES NOT
GUARANTEE A LIFETIME OF
ANKLE FUNCTION**

**But, a poor reduction is likely to lead to early DJD
and need for reconstruction**

SUMMARY

- Reduction the posterior malleolus is the goal and is achievable in most cases
- Timing is not critical but early surgery can get recovery moving earlier
- Choose your surgical approaches
- Fibular length and lateral joint space are determinants of lateral buttress
- Hardware is not critical element as long as enough stability obtained to move the foot and moved early

THESE ARE THE BASICS AND YOU CAN DO THIS-

