

# 10<sup>th</sup> Advanced Course on Knee Surgery

## Lateral opening wedge: indications and technique

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# Indications

Indications:

- Valgus limb alignment
- LDFA > 87
- Lateral compartment pain generator – combined chondral and meniscal damage
- (Functionally demanding patient not suitable for arthroplasty solutions)



# Indications

Indications:

- 36 year old man
- Previous lateral meniscectomy
- Lateral knee pain
- Recurrent effusions
- Unable to run/play sports



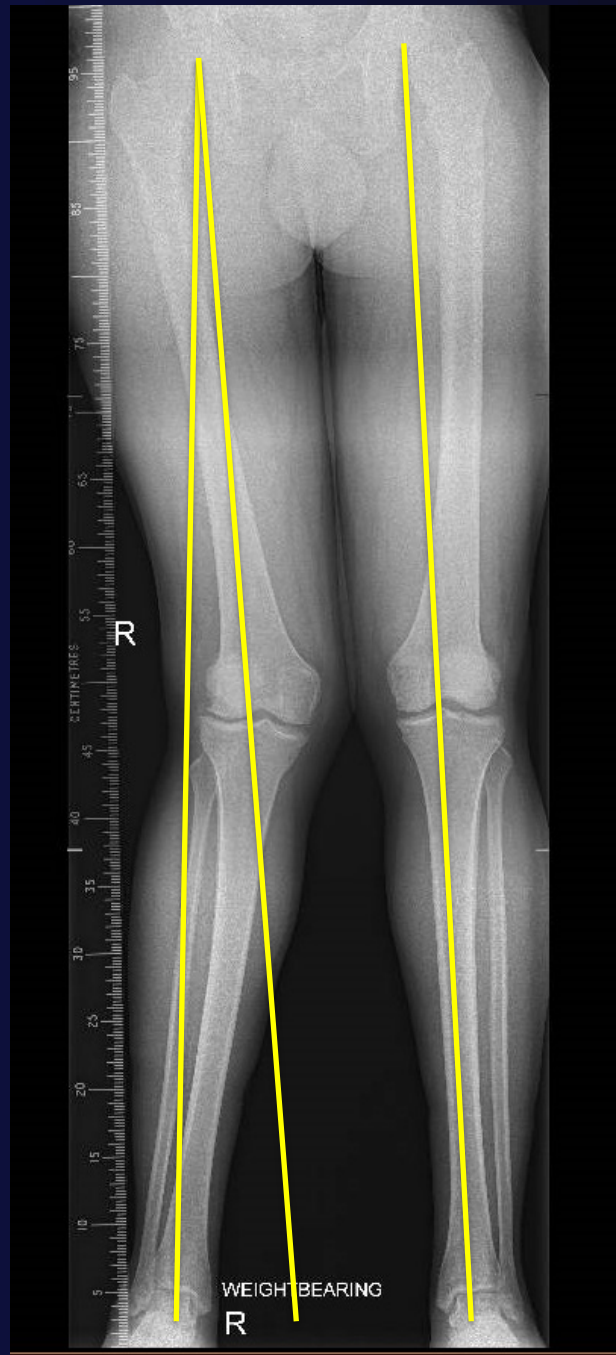
# Indications



# Indications

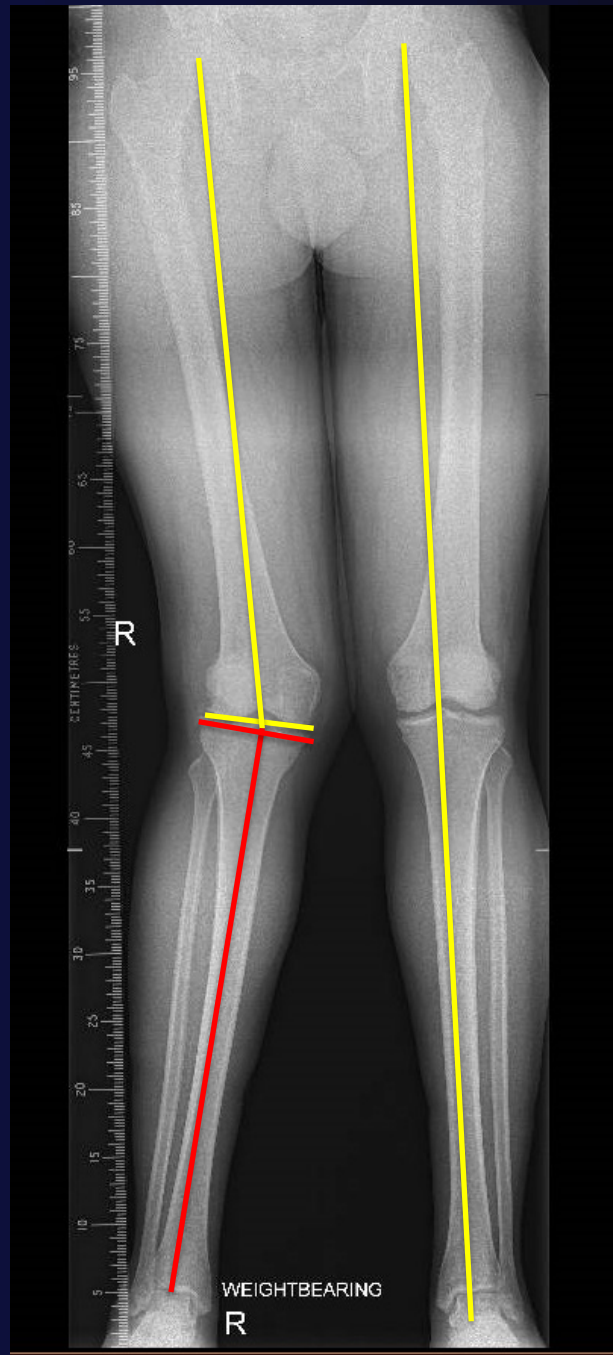


- 7 deg valgus



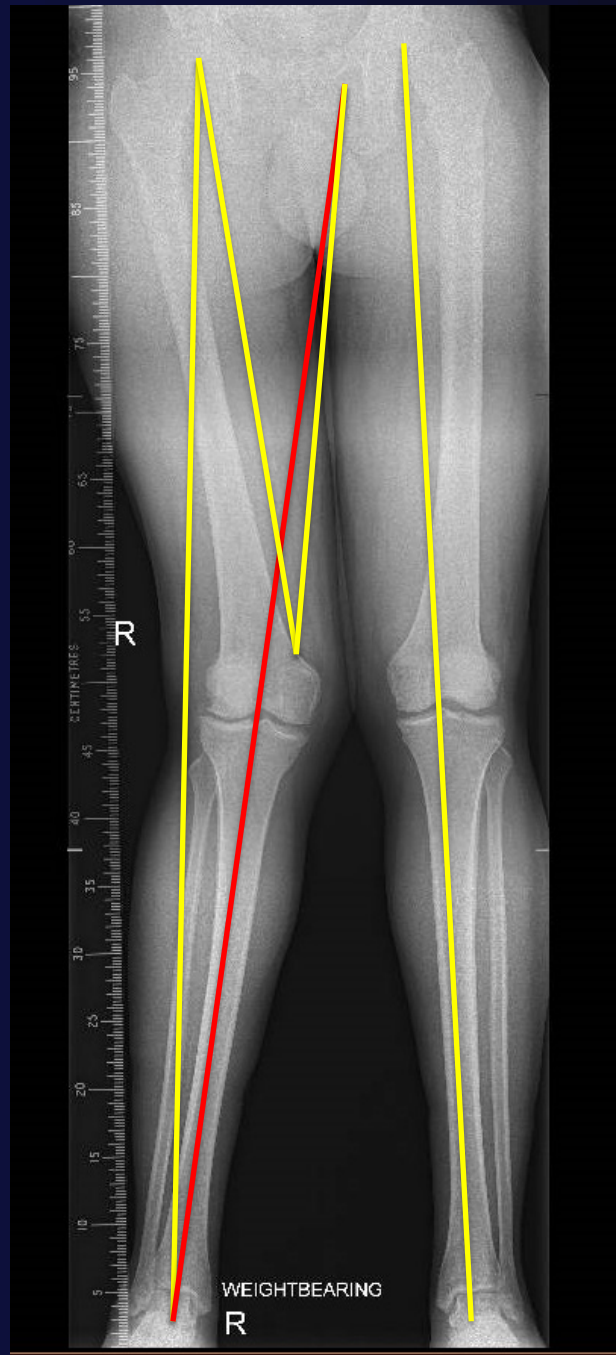


- 7 deg valgus
- 80 deg LDFA
- 90 deg MPTA



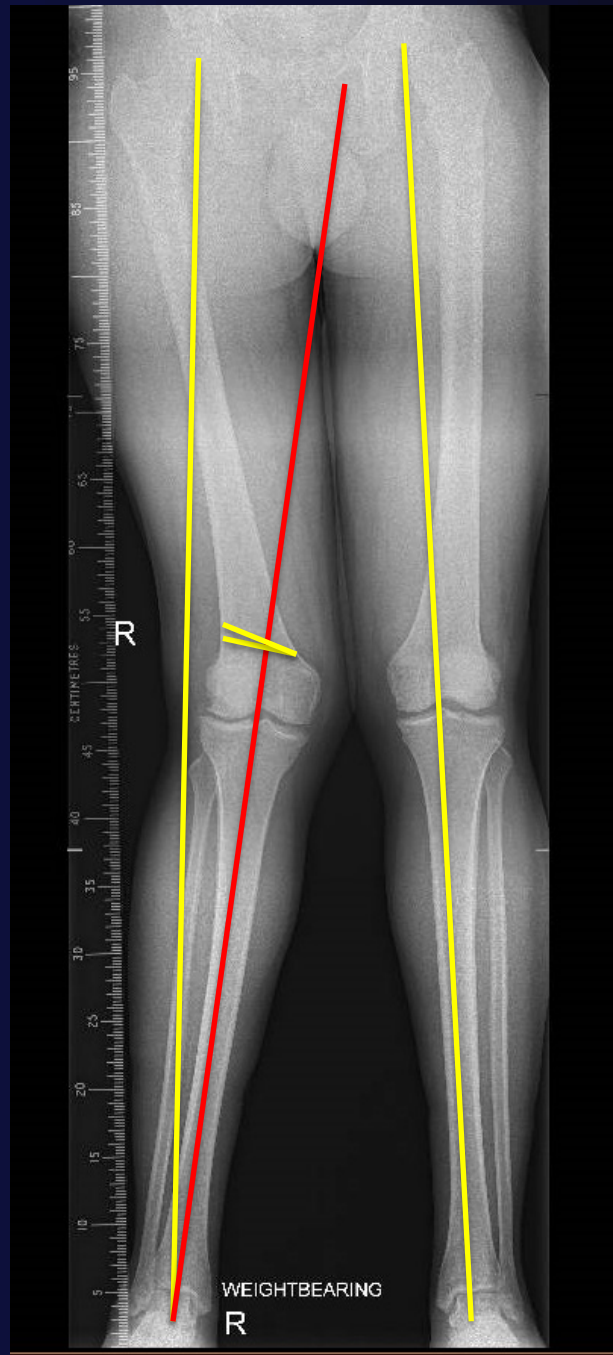
- Plan correction:

- Correction of axis
- Angular correction at hinge





- Plan correction:
  - Correction of axis
  - Angular correction at hinge
  - Rotate to osteotomy plane



# Planning

- Plan correction:
  - Correction of axis
  - Angular correction at hinge
  - Rotate to osteotomy plane
  - Measure opening (8mm)



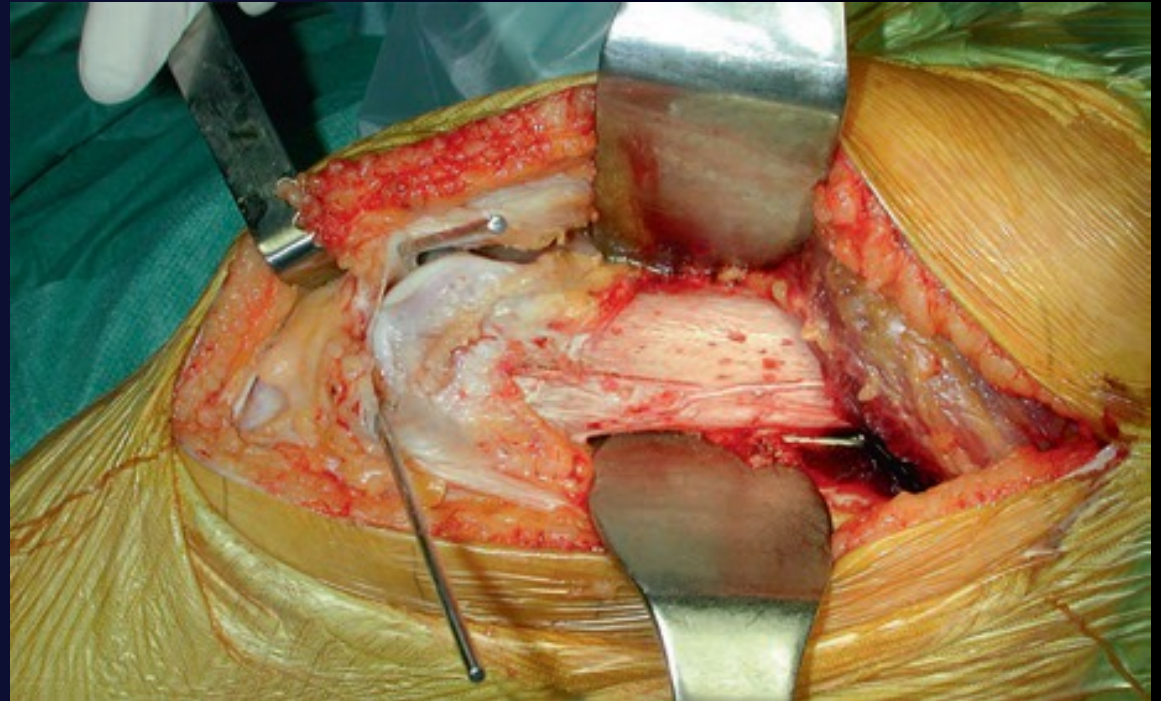
# Technique

- Standard lateral approach
- Mini approach possible with experience
- Lateral incision



# Technique

- Standard lateral approach
- Mini approach possible with experience
- Lateral incision
- Split ITB and elevate vastus lateralis from intermuscular septum



# Technique

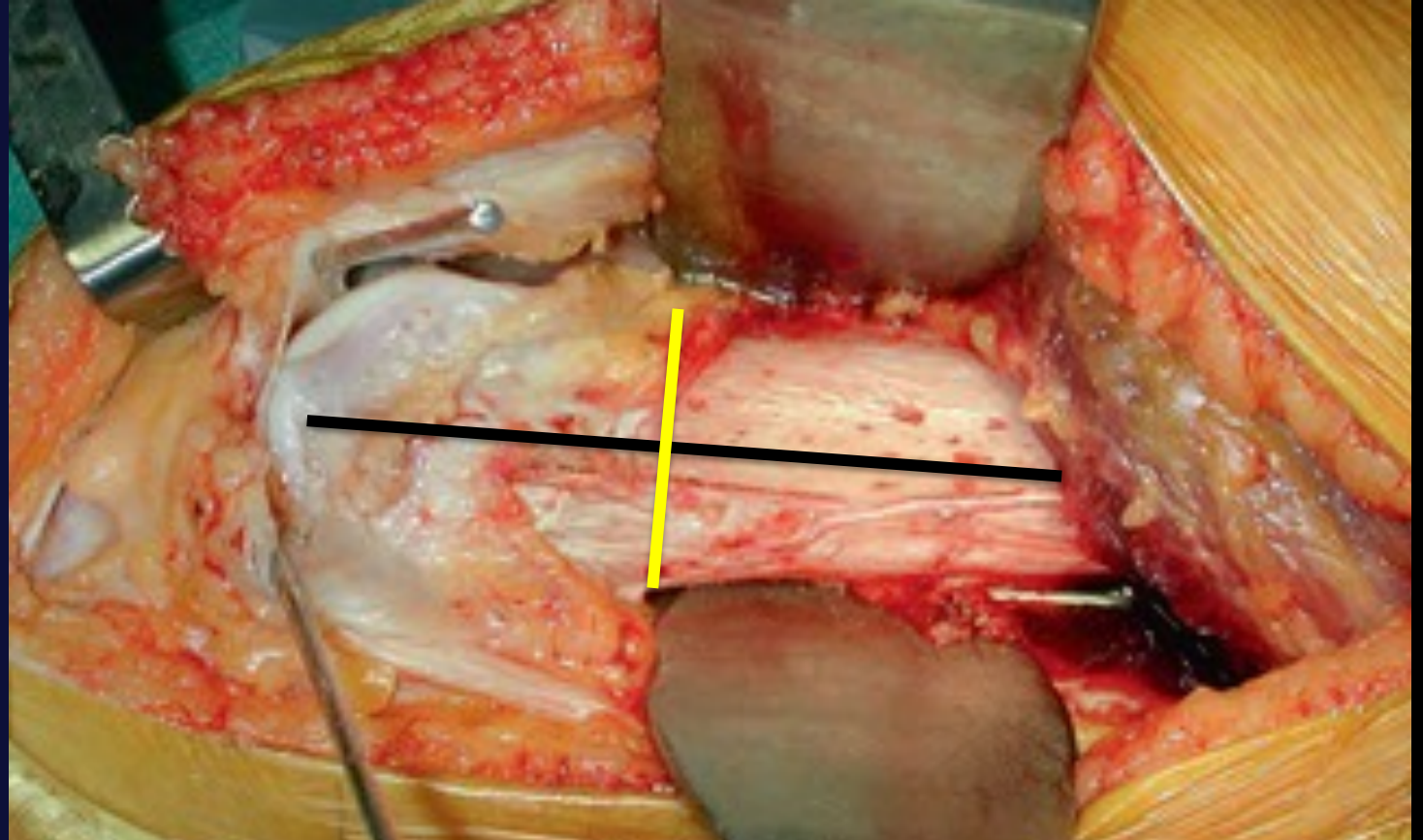
- Pass guide wire under image intensifier control
- Remember your plan!





# Technique

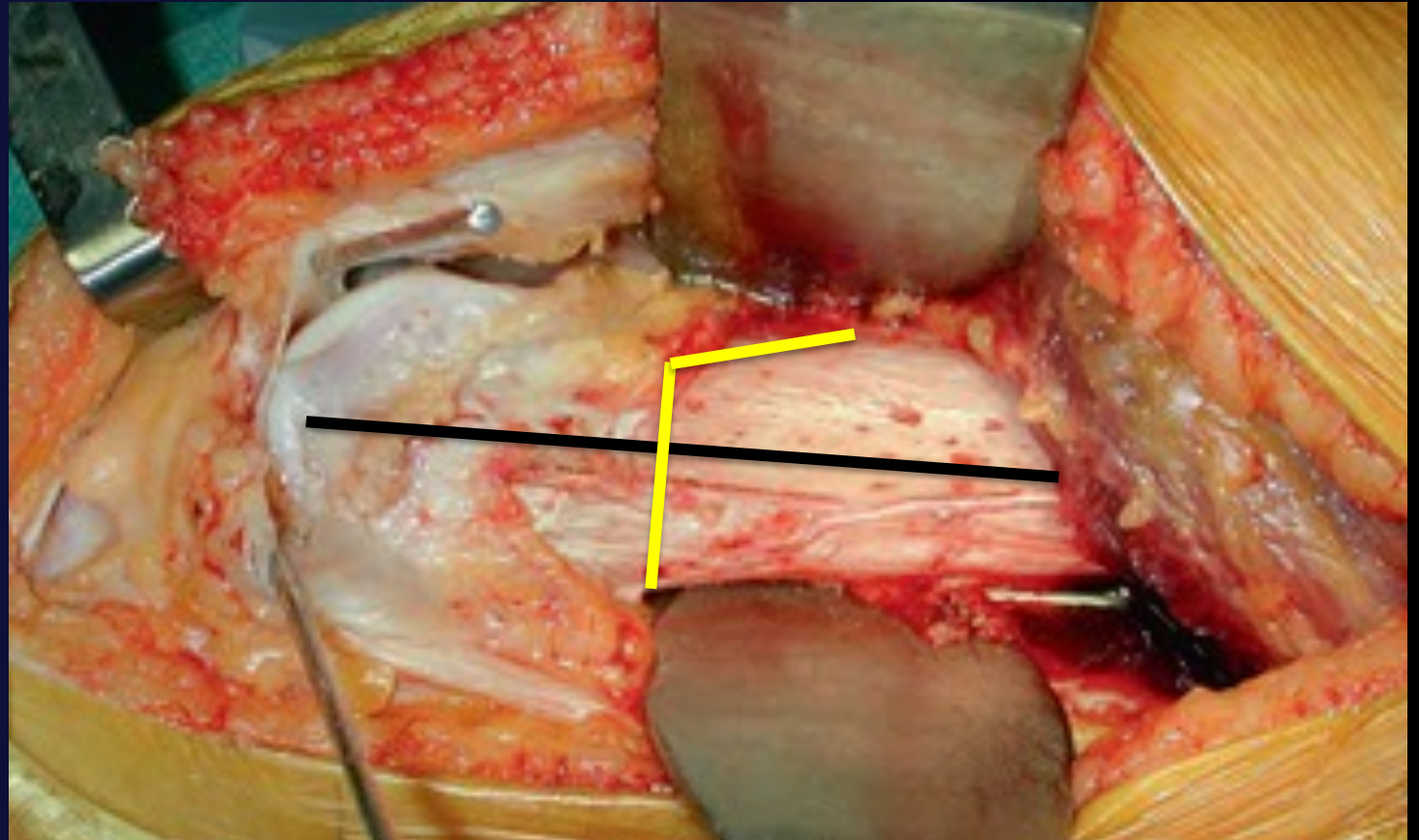
- Single plane or 2 plane osteotomy





# Technique

- Single plane or 2 plane osteotomy



# Technique

- Osteotomy with power saw and osteotomes
- Sequential stacking of osteotomes to ease osteotomy open



# Technique

- Osteotomy with power saw and osteotomes
- Sequential stacking of osteotomes to ease osteotomy open
- Optional bone graft to maintain desired correction



# Technique

- Osteotomy with power saw and osteotomes
- Sequential stacking of osteotomes to ease osteotomy open
- Optional bone graft
- Plate fixation



# Technique

- Osteotomy with power saw and osteotomes
- Sequential stacking of osteotomes to ease osteotomy open
- Optional bone graft
- Plate fixation
- 50%WB for 4/52, FROM
- Union at 3-6 months





# Conclusion

- Safe and reliable technique
- Good survivorship at 7-10 years
- Avoid over-correction
- Allows return to full activity
- Bulky plates often need removing





# Thank you



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