



ESSKA



EKA

European Knee Associates
A section of ESSKA

MEDIAL UKA

Fixed Bearing

Guillaume DEMEY , David DEJOUR

Lyon Ortho Clinic

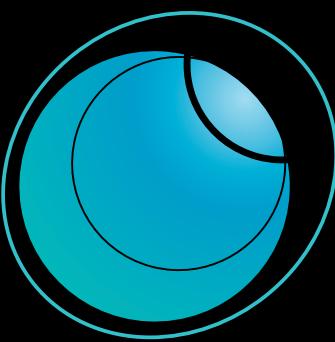
Lyon, FRANCE



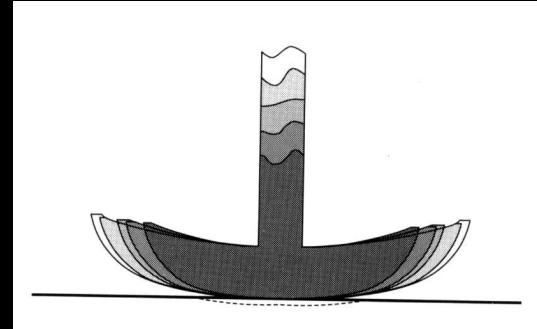
LYON ORTHO CLINIC



“Round-on-Flat” Articulation



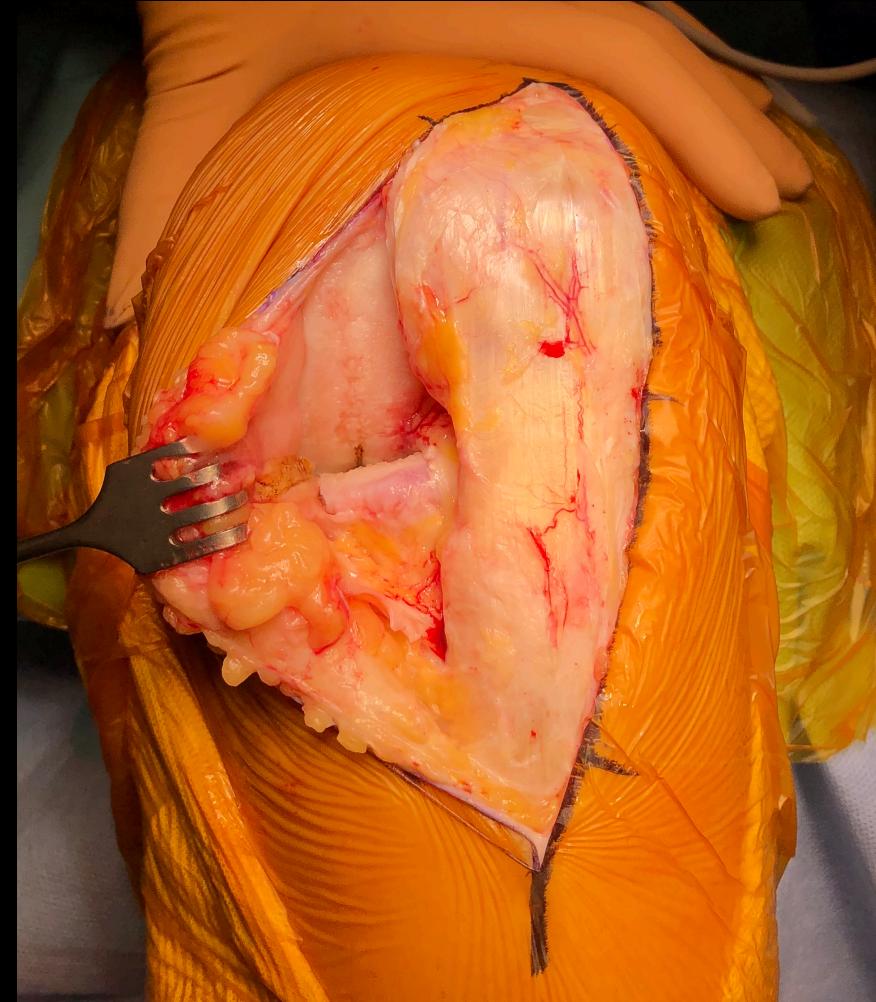
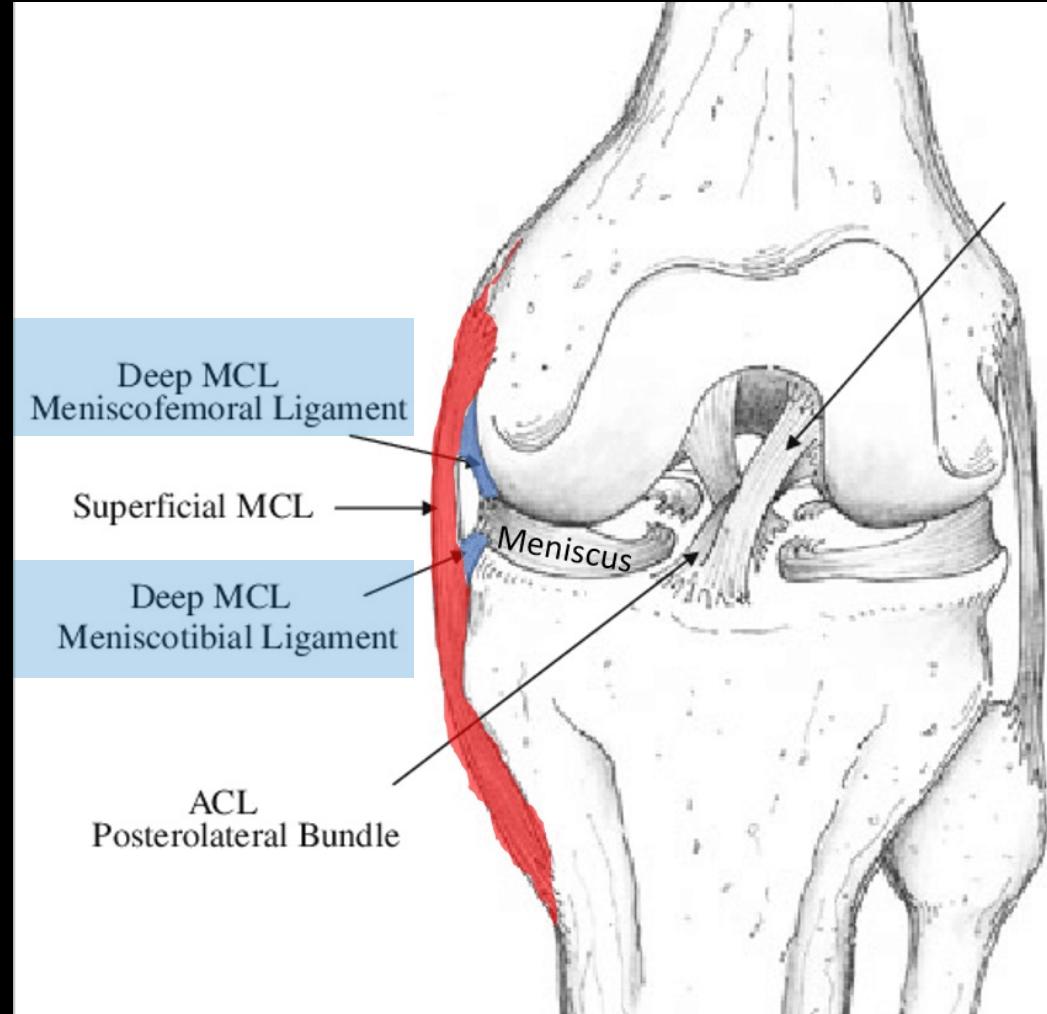
- ✓ Unconstrained design
- ✓ Curved femoral component
- ✓ Flat Fixed-Bearing surface
- ✓ Allowing soft tissues to dictate motion of the knee
- ✓ The poly deforms by creep and becomes dished and conforming without wear
- ✓ Limited varus or valgus tilt of the femoral component without edge loading (the amount depending on the prosthesis)



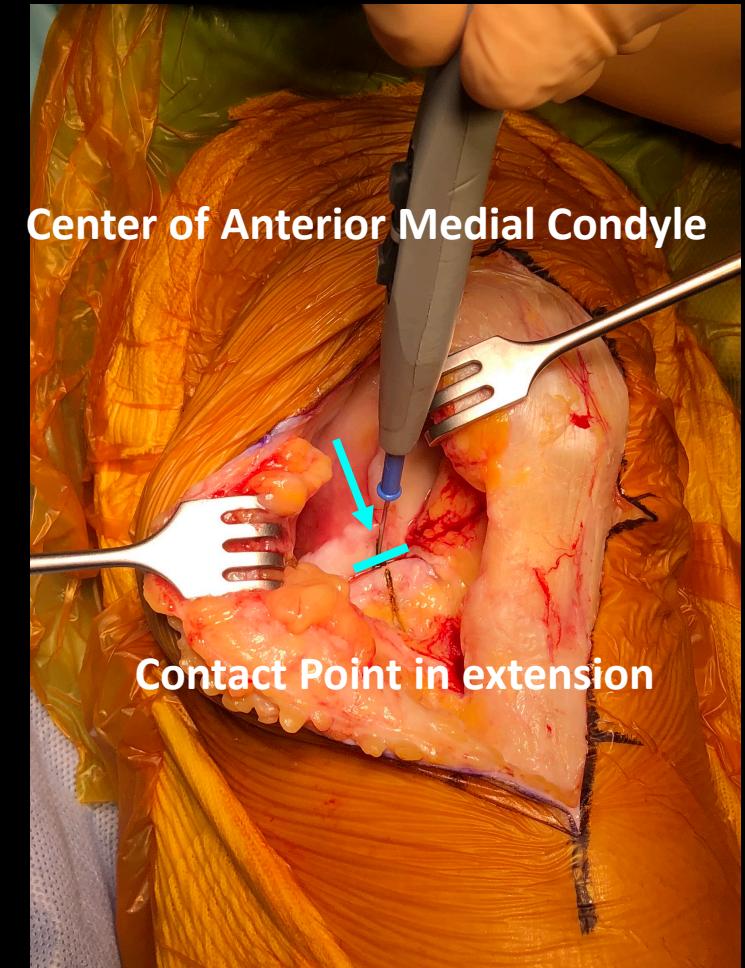
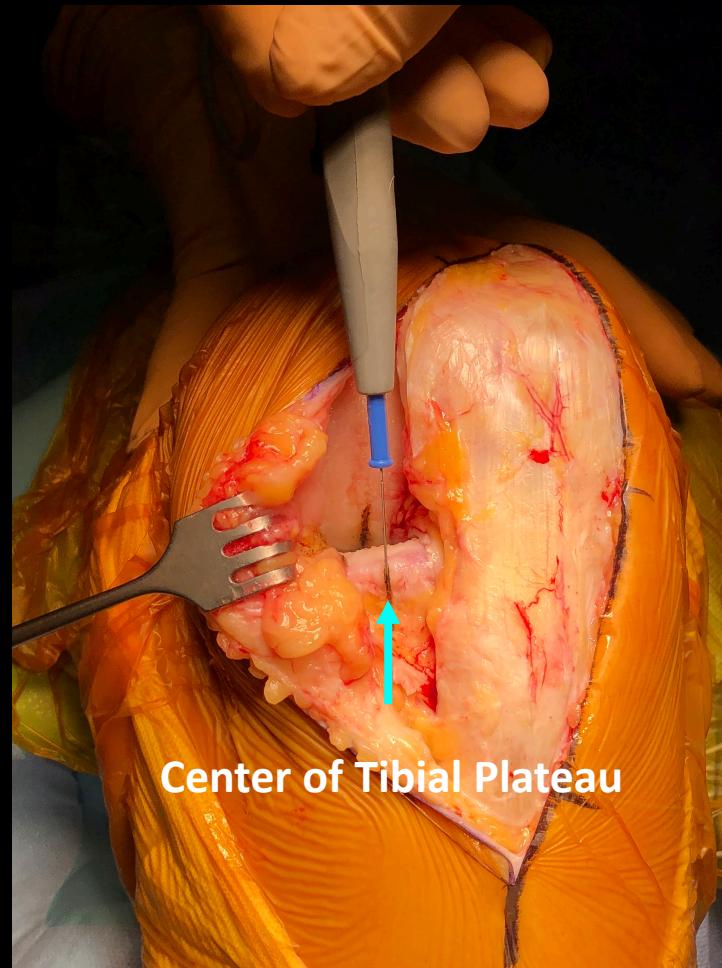
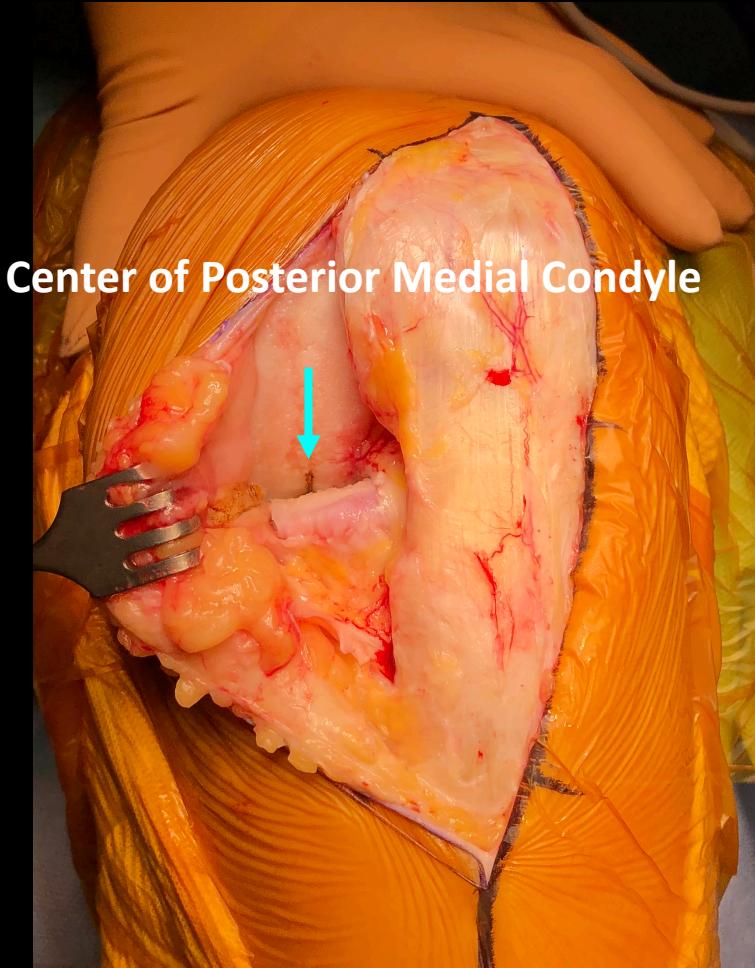
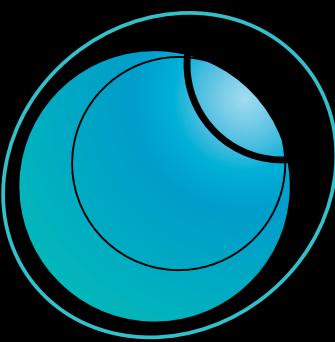
My Top 10 Technical Considerations

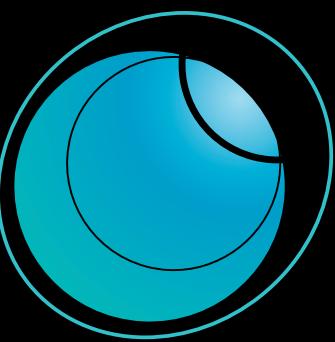


1. NO Release!

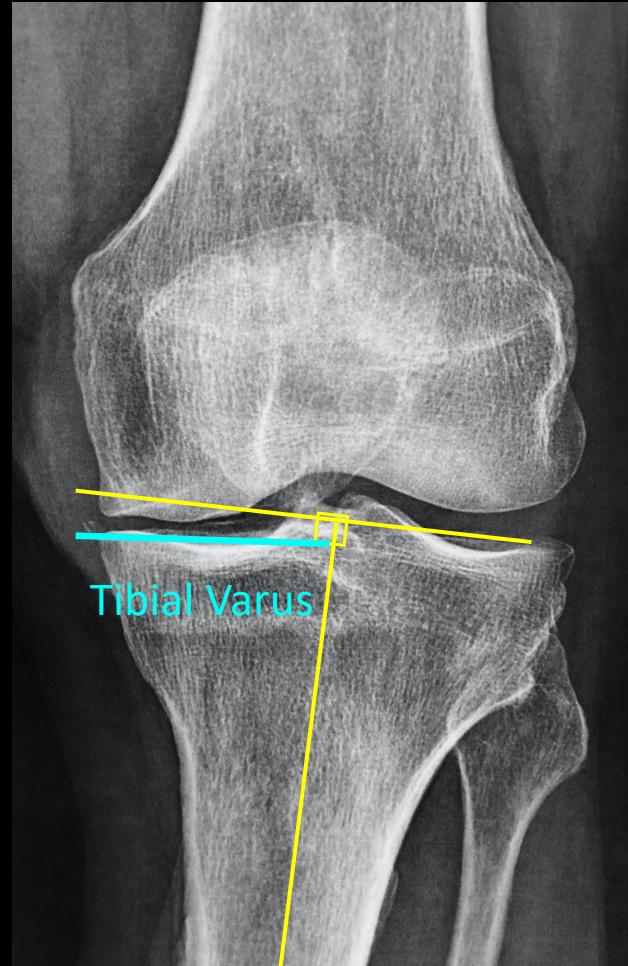


2. Landmarks : Very Important Points

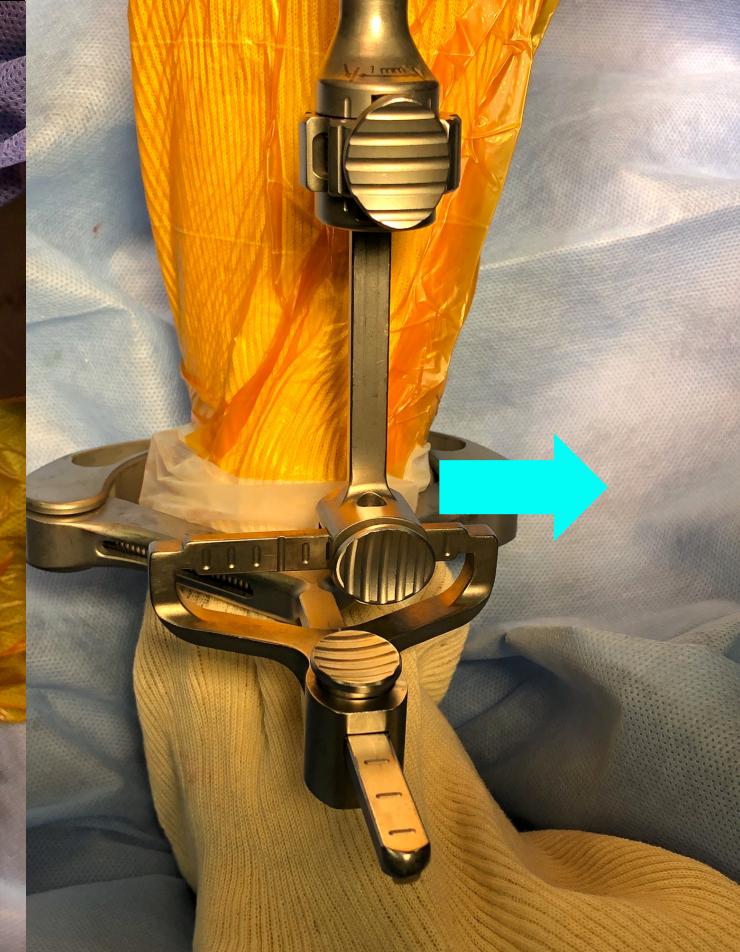
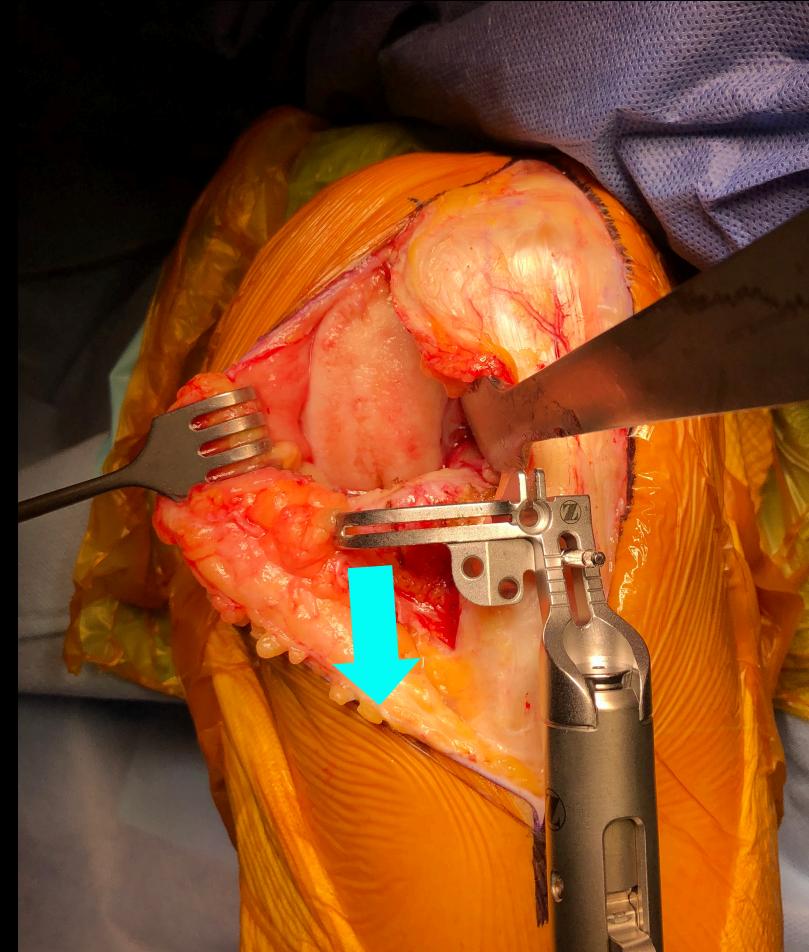
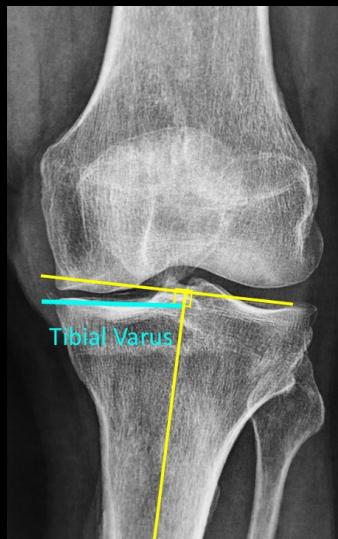


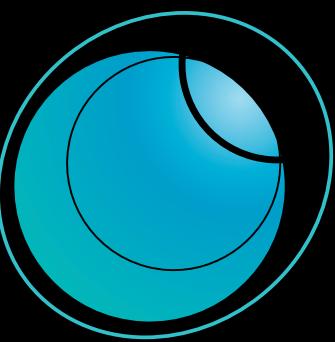


3. Tibial Cut : Restore Varus

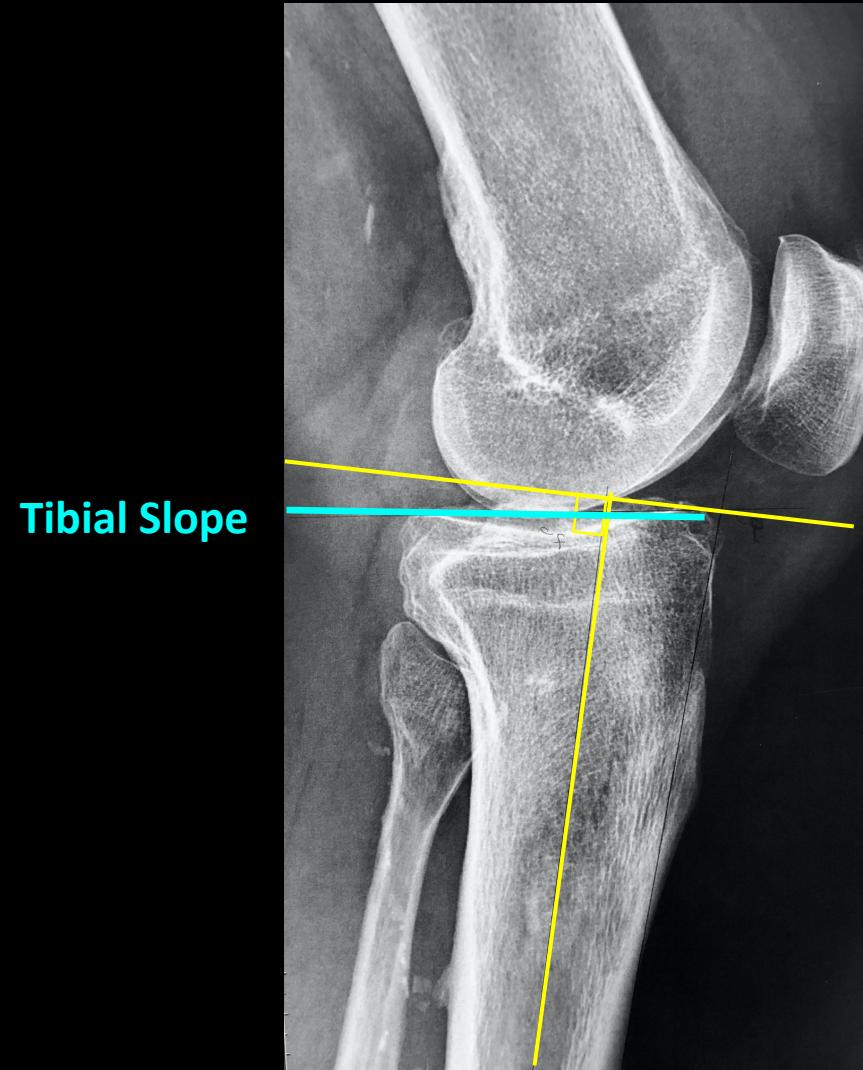


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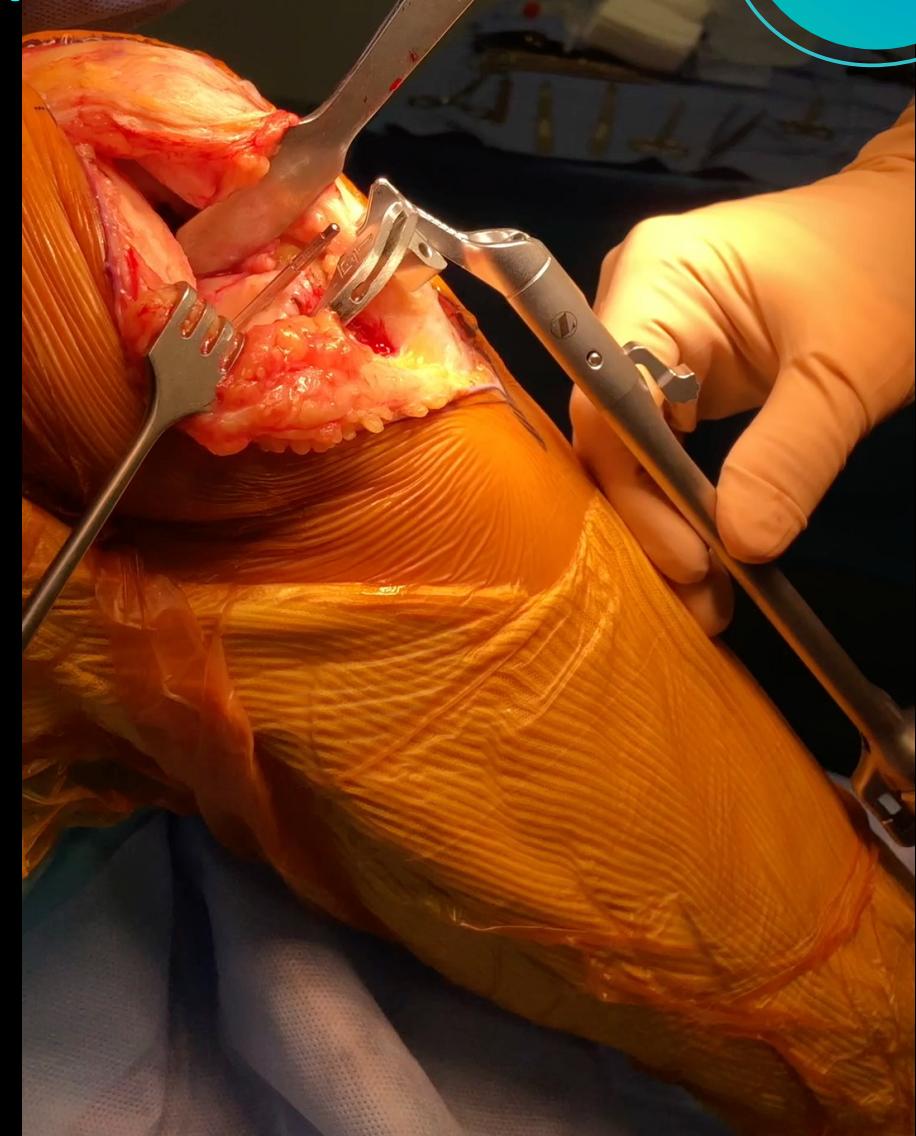
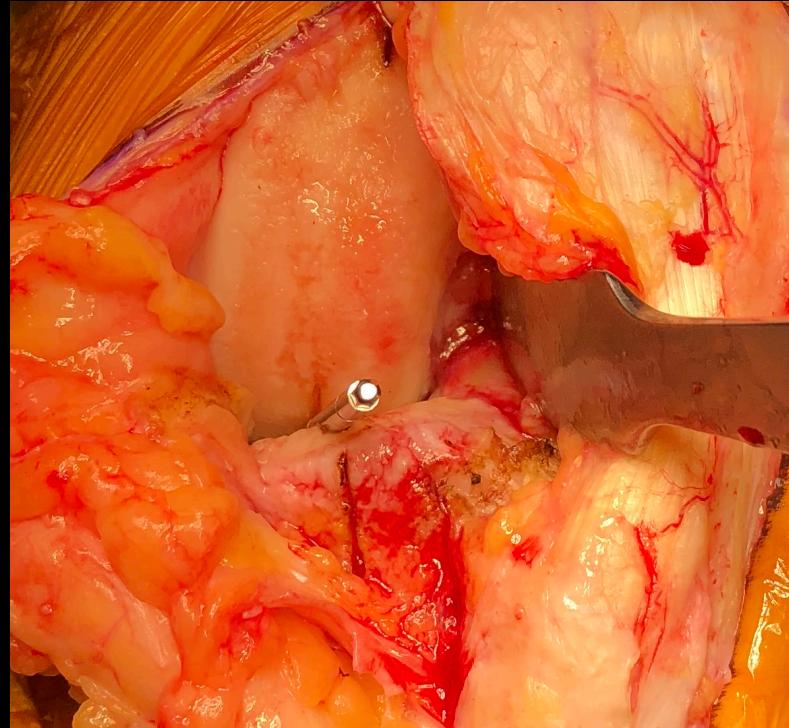




4. Tibial Cut : Restore Slope

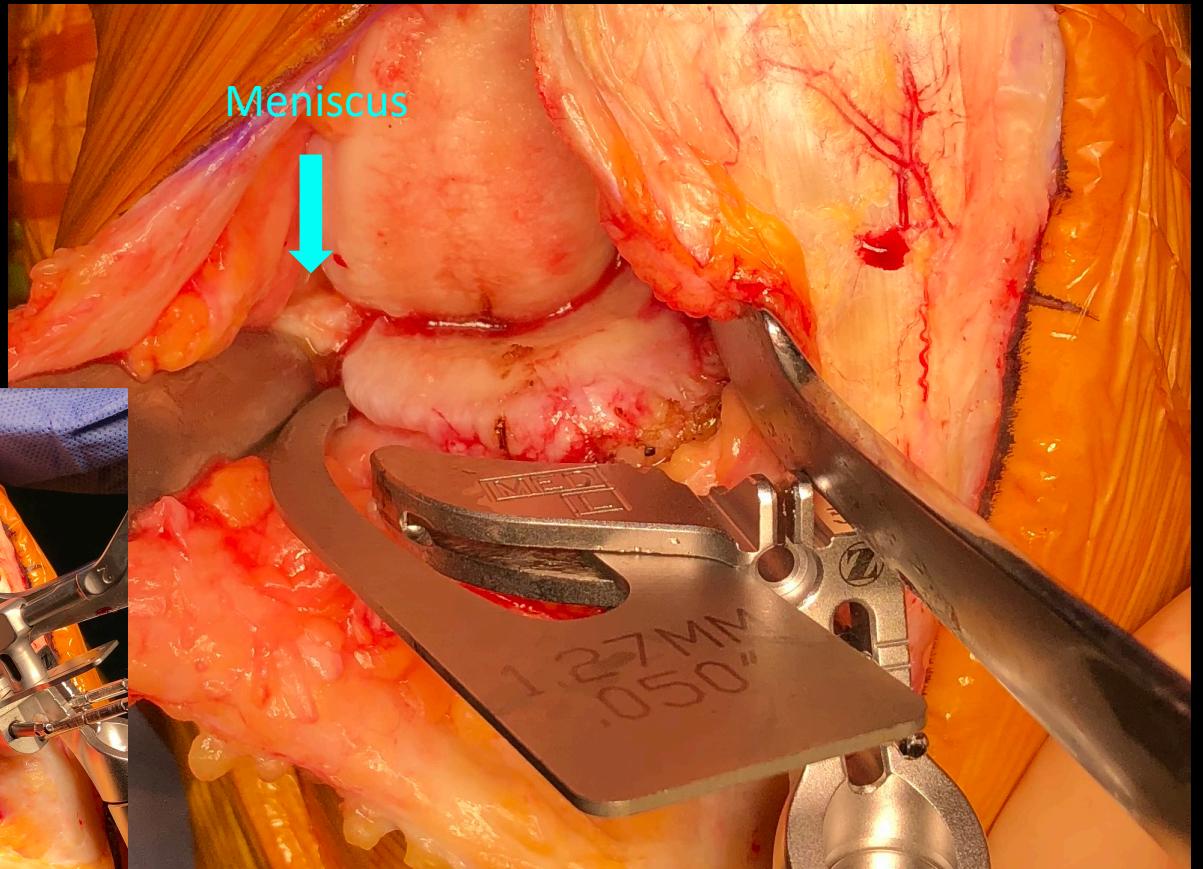
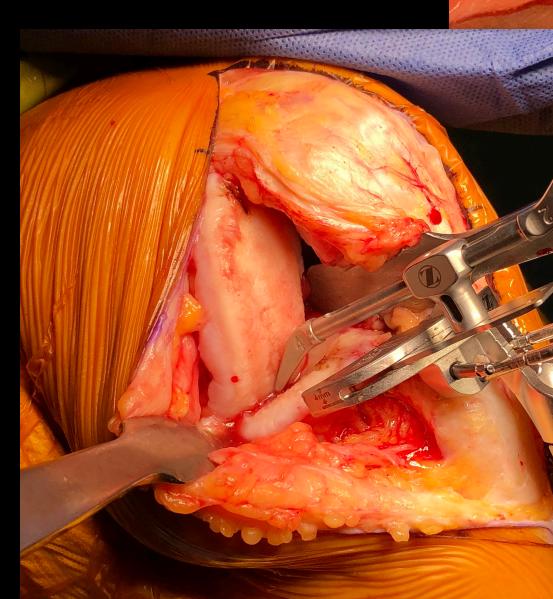
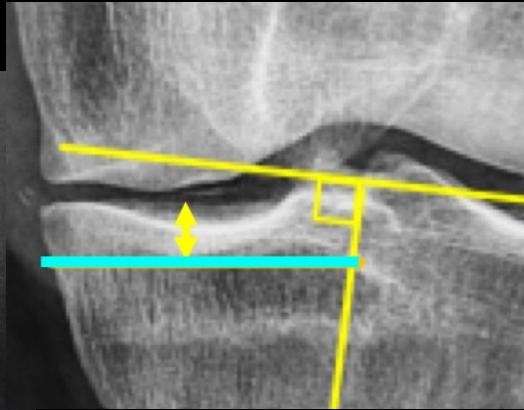
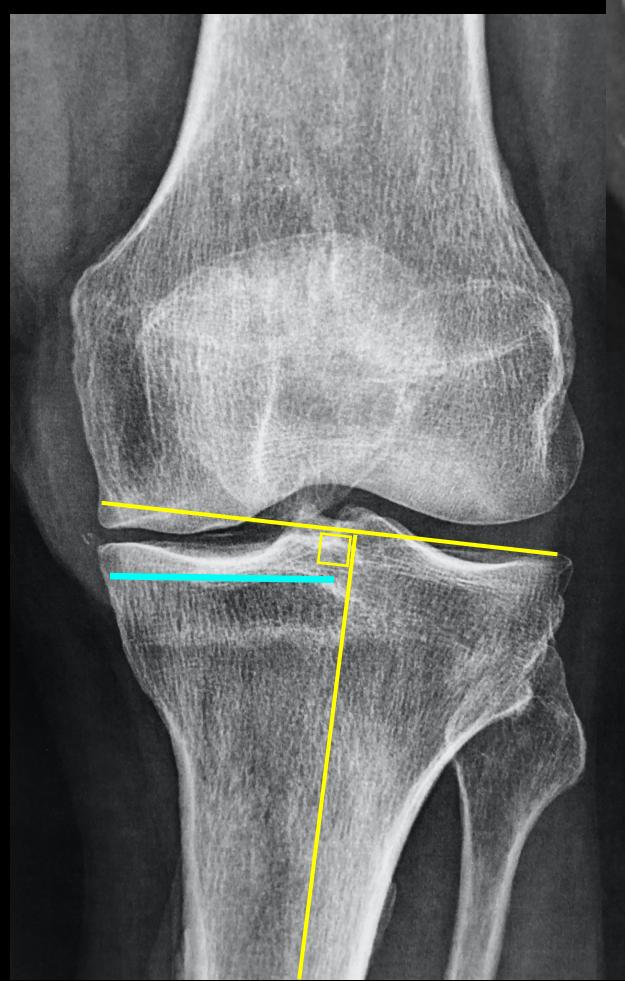


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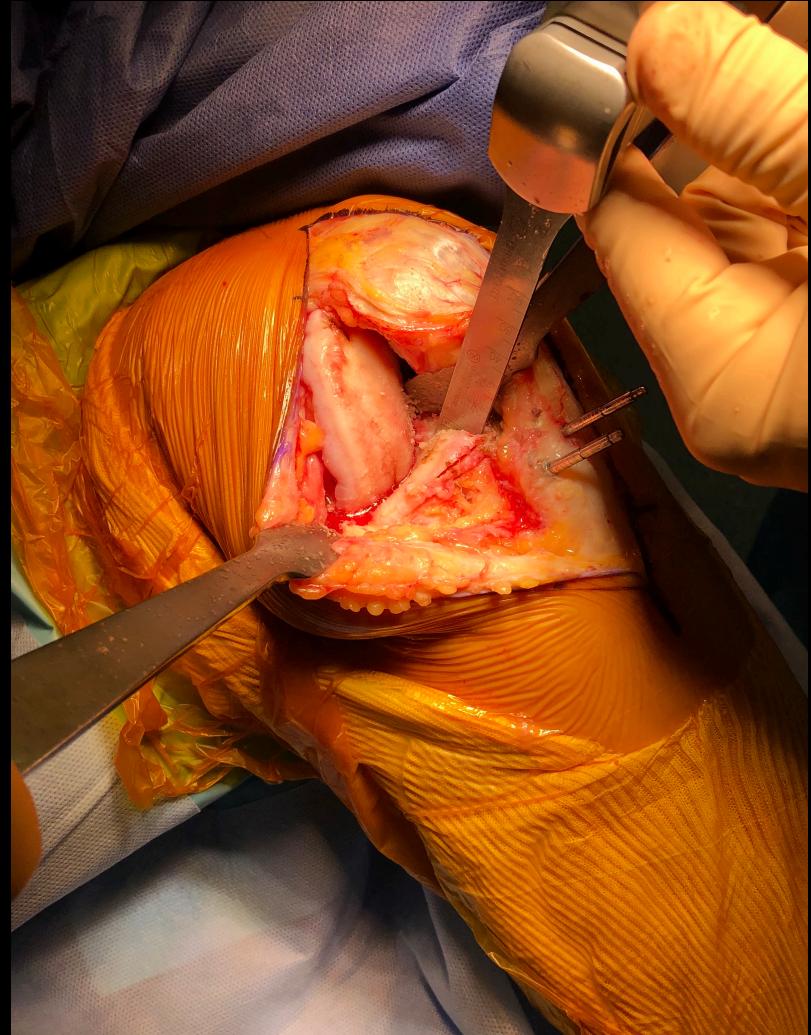
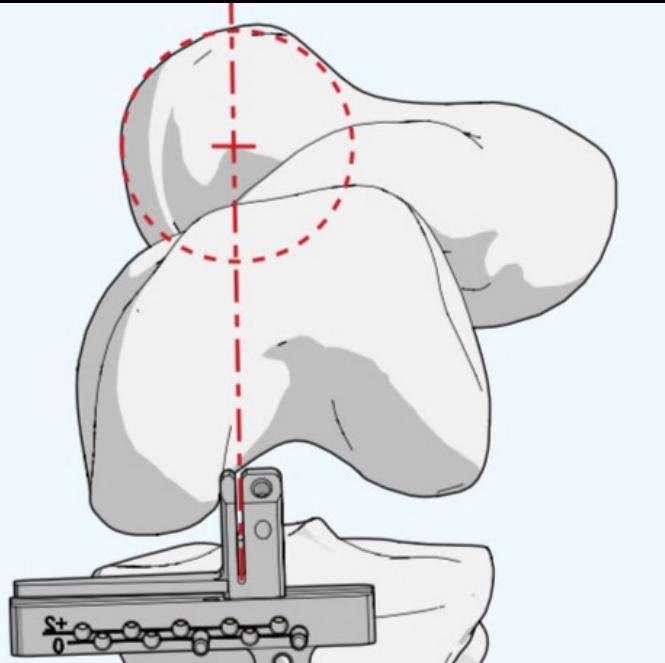
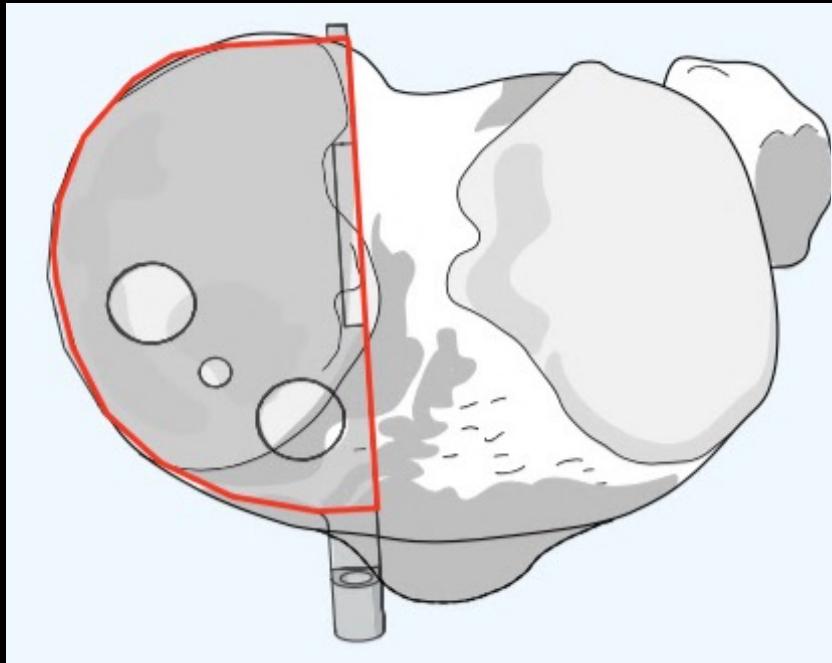
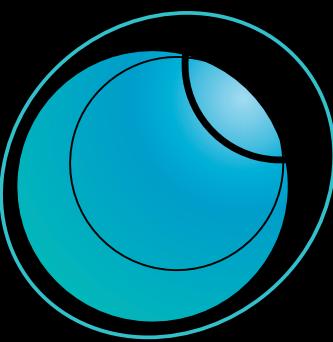




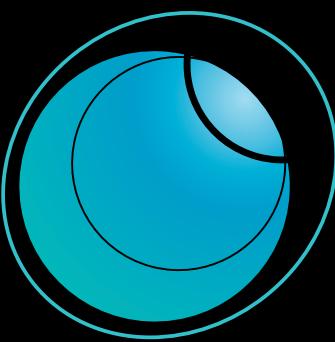
5. Horizontal Plan : Thickness



5. Horizontal Plan : Orientation



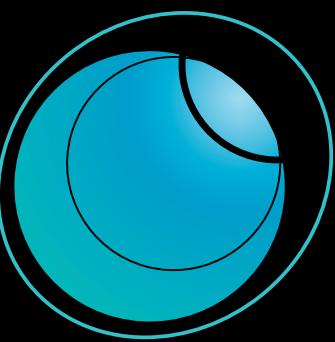
Tibial Cut : Do It Right!



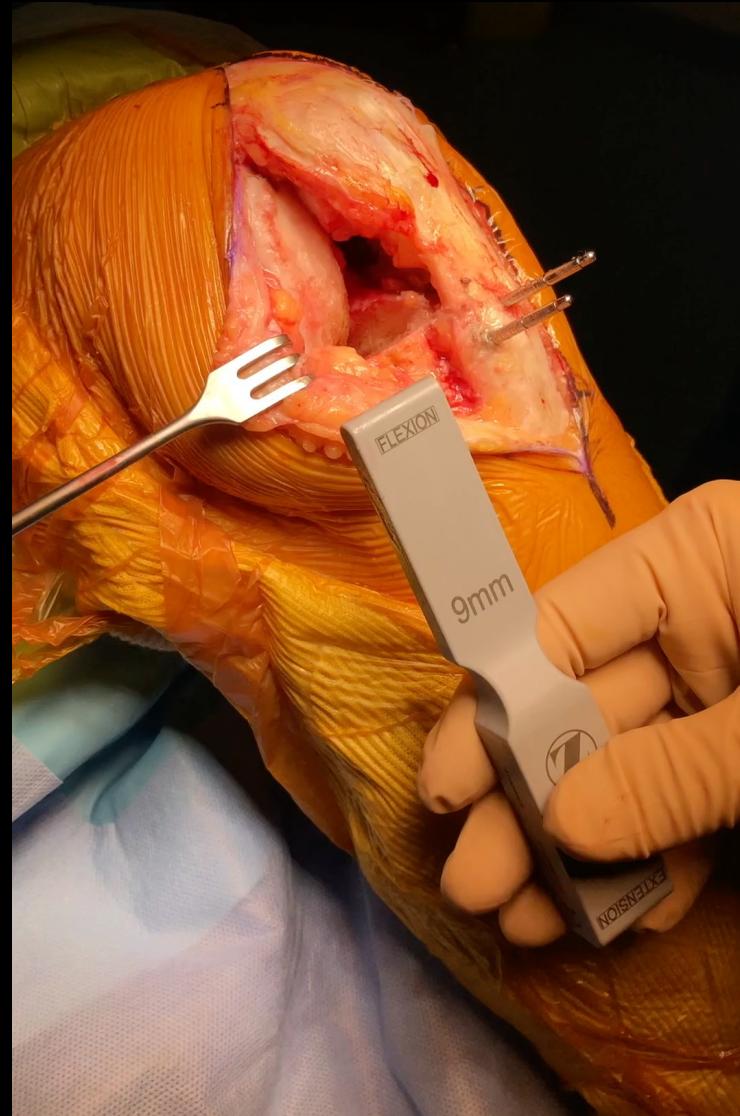
- ✓ Posterior Tibial Slope $>7^\circ$
 - ✓ Change in slope $>2^\circ$
 - ✓ Residual mechanical varus $> 5^\circ$
 - ✓ Change in tibial component obliquity $>3^\circ$
 - ✓ $>2\text{mm}$ change in joint space height
 - ✓ Divergence between the tibial and femoral components $>6^\circ$
- Risk of Mechanical Failure

1. Hernigou P, Deschamps G. Posterior slope of the tibial implant and the outcome of unicompartmental knee arthroplasty. JBJS (Am) 2004

2. Chatellard et al. Medial unicompartmental knee arthroplasty: does tibial component position influence clinical outcomes and arthroplasty survival? OTSR 2013



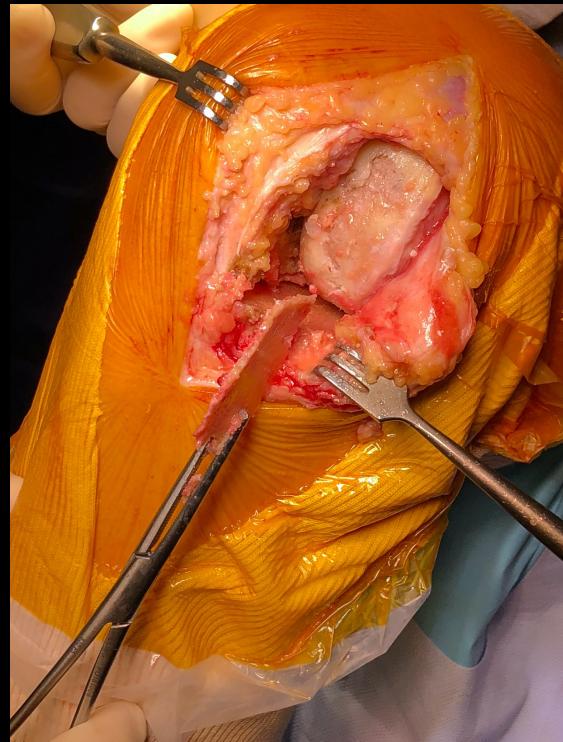
6. Stability of the Tibial Trial





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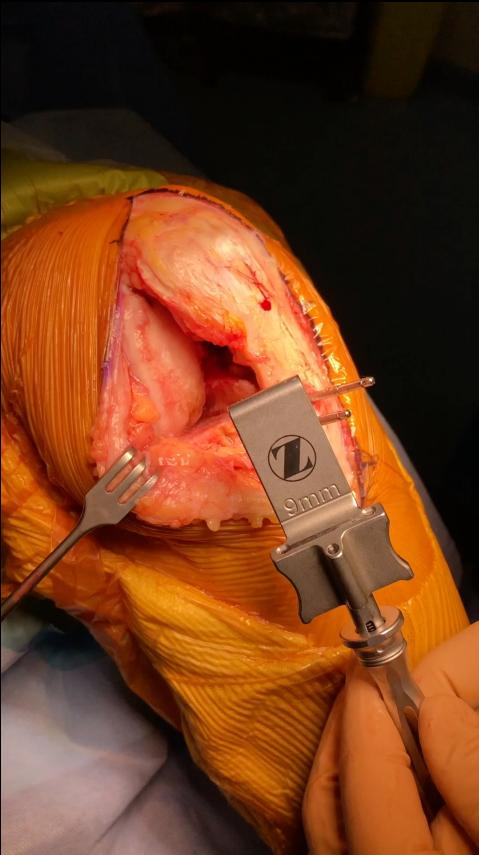
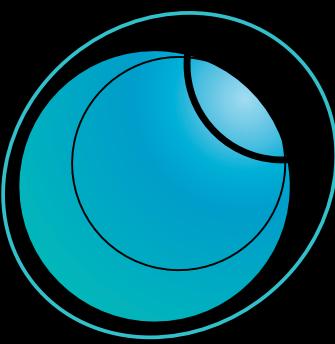
Too Tight =
+2mm Recut



Lift off =
Increase Slope +
resection of MM



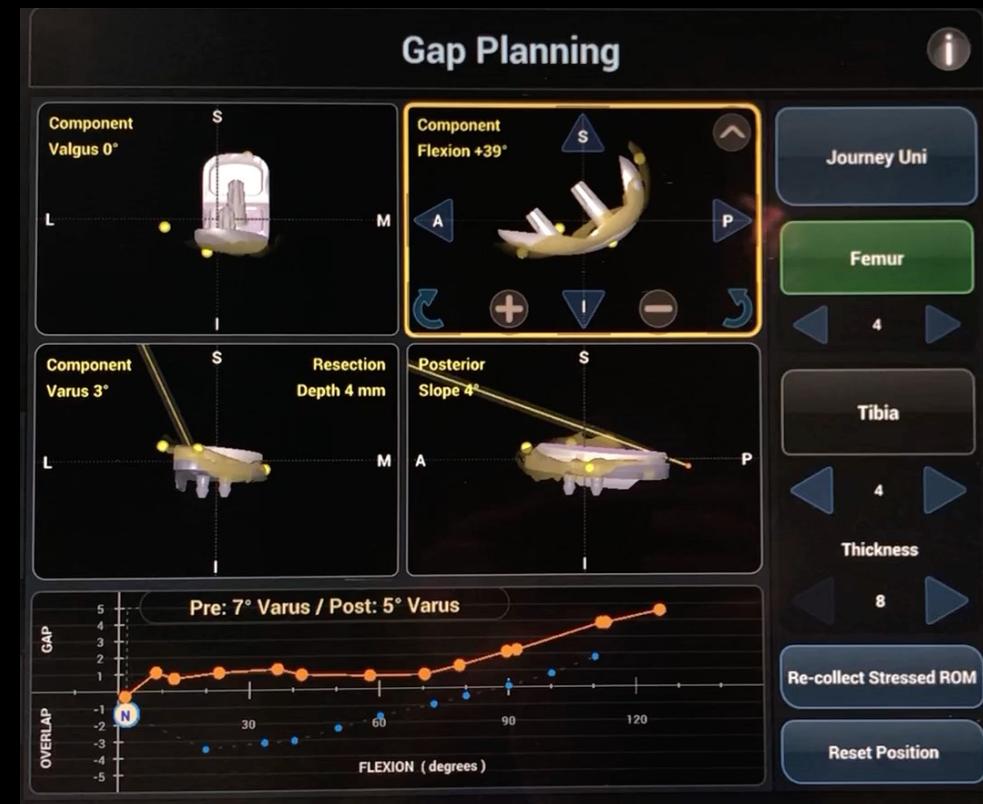
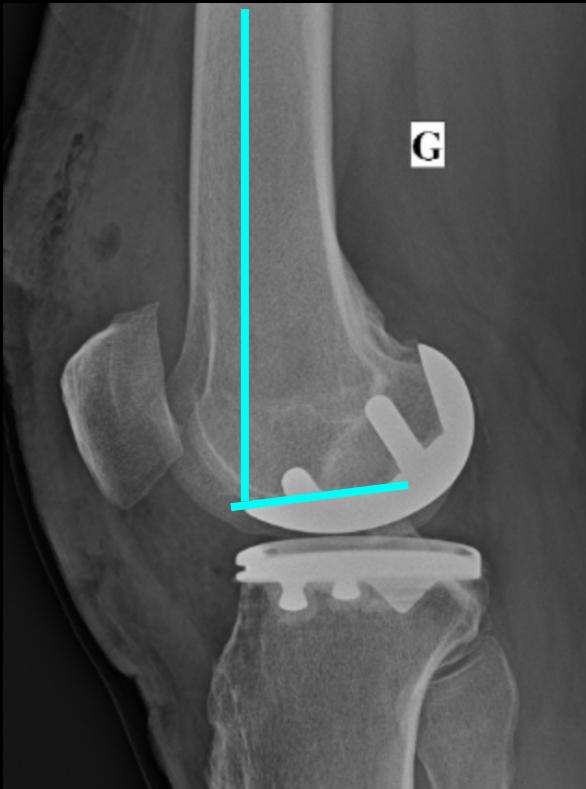
7. Alignment of the Femoral Component : In Extension



7. Alignment of the Femoral Component : In Extension = Sagittal

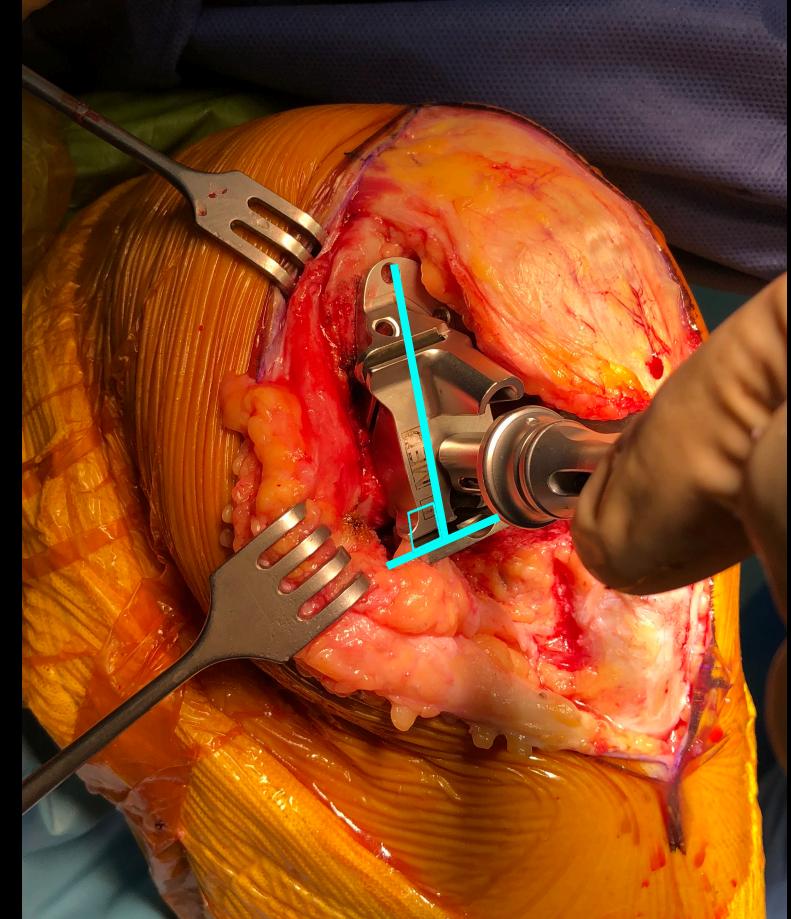
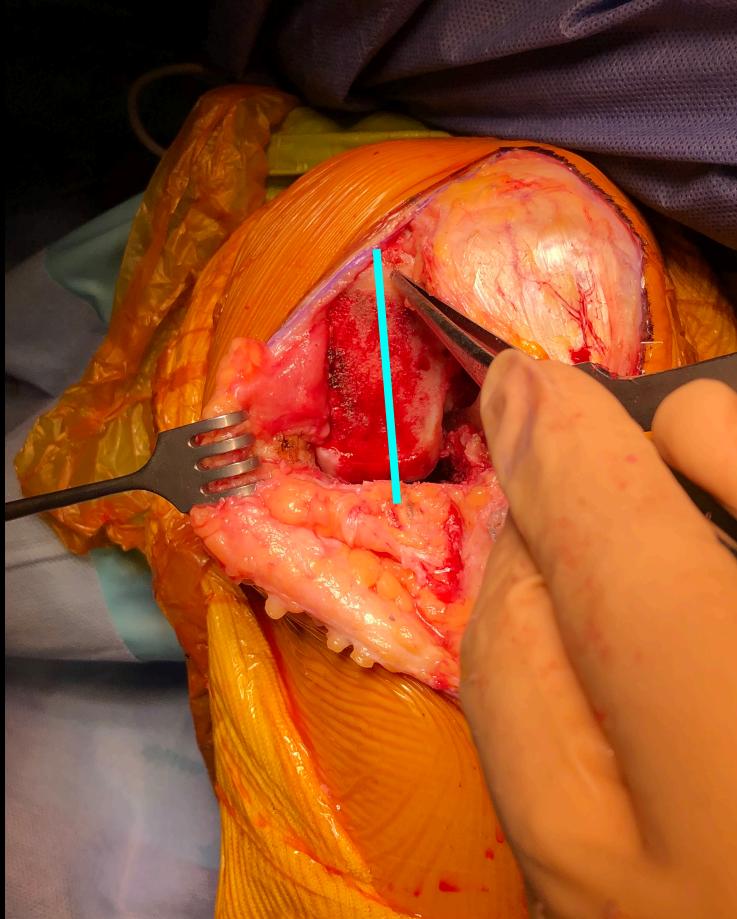
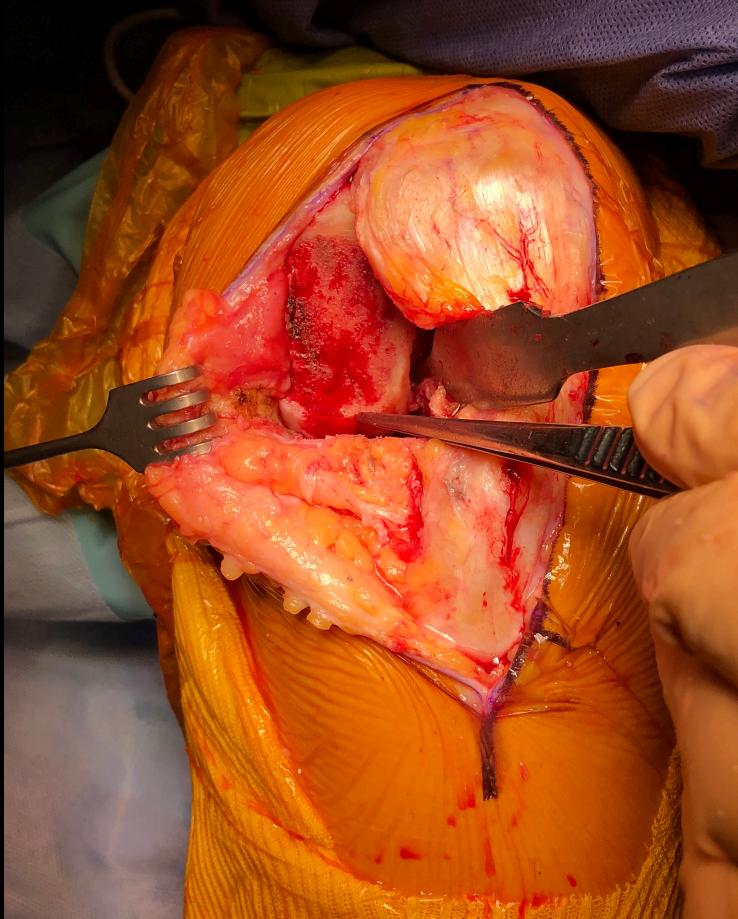
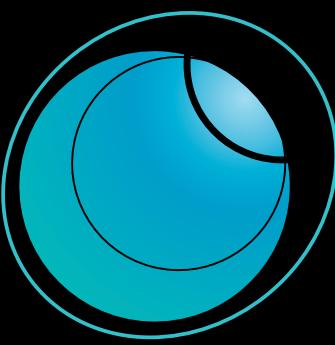


Impact of femoral flexion on Gap in flexion and extension

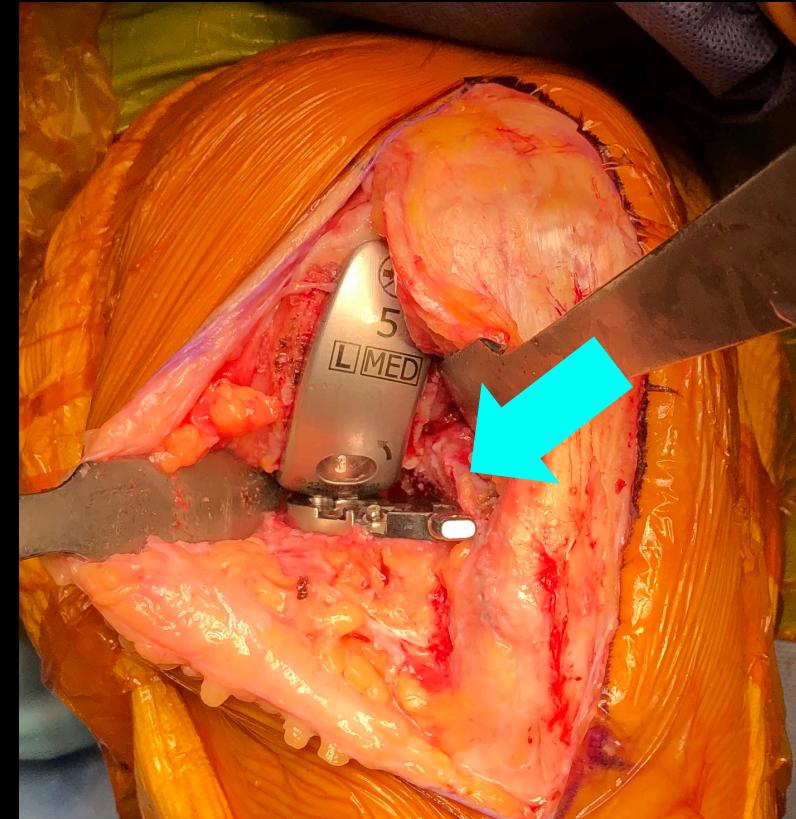
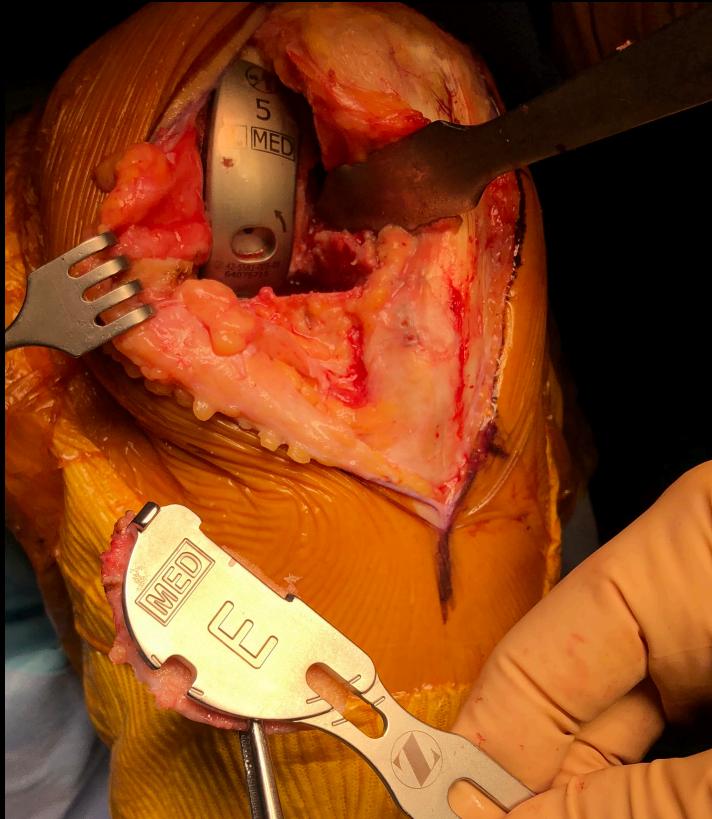
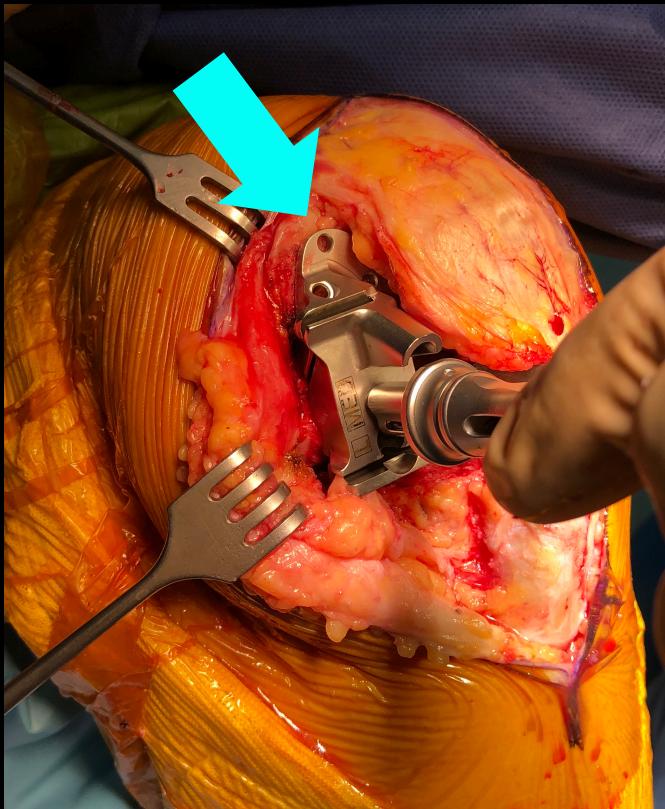
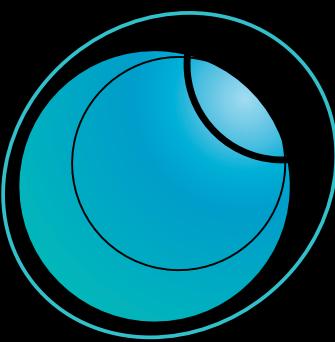


Courtesy C Batailler, S Lustig, Journées Lyonnaises du Genou 2020

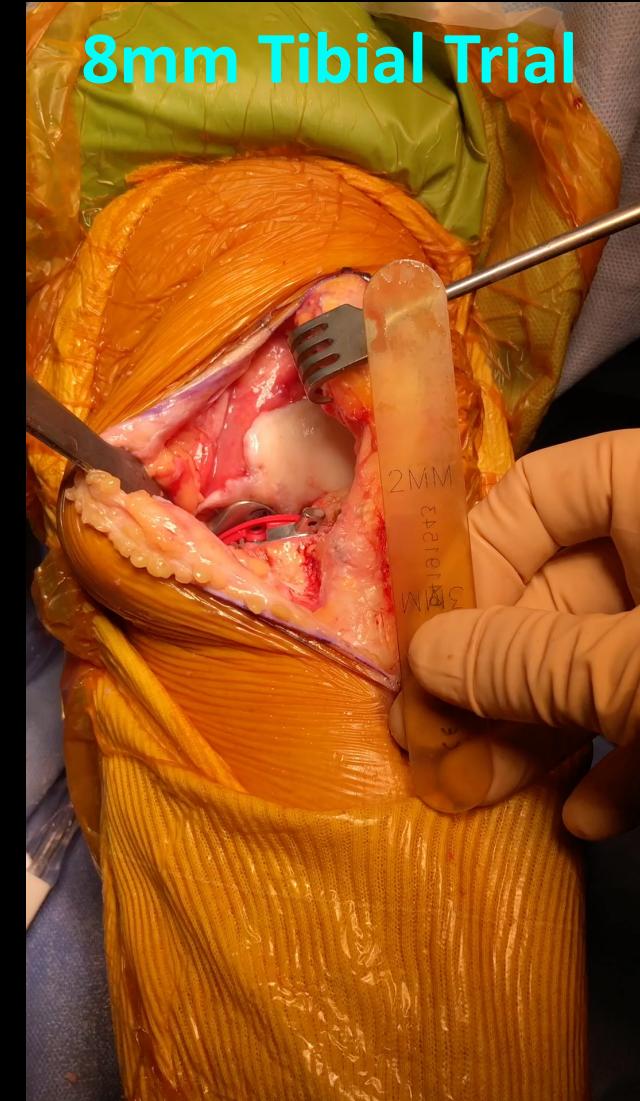
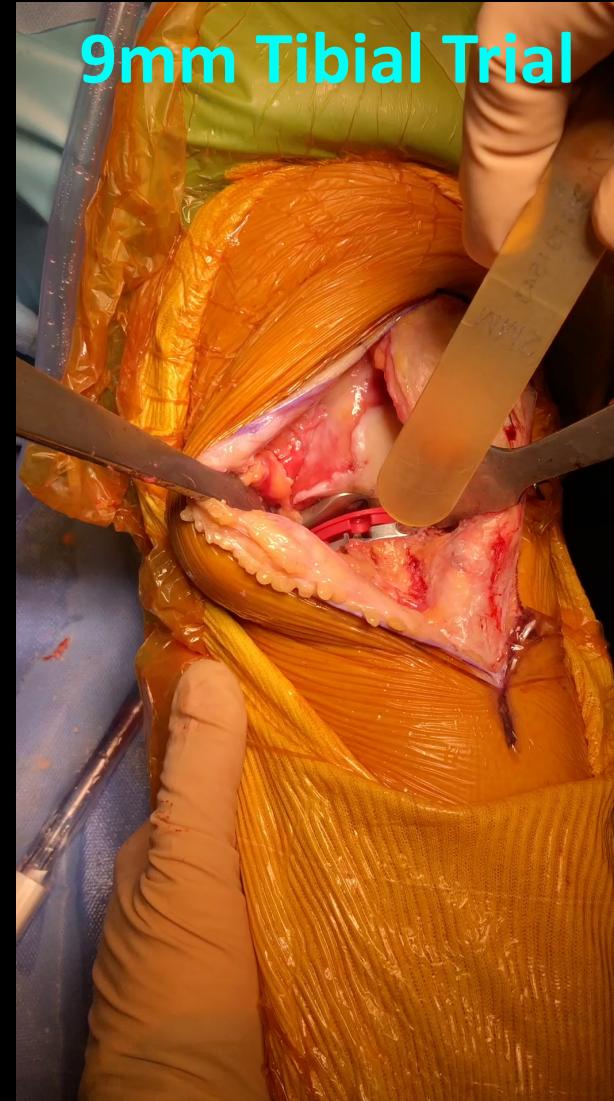
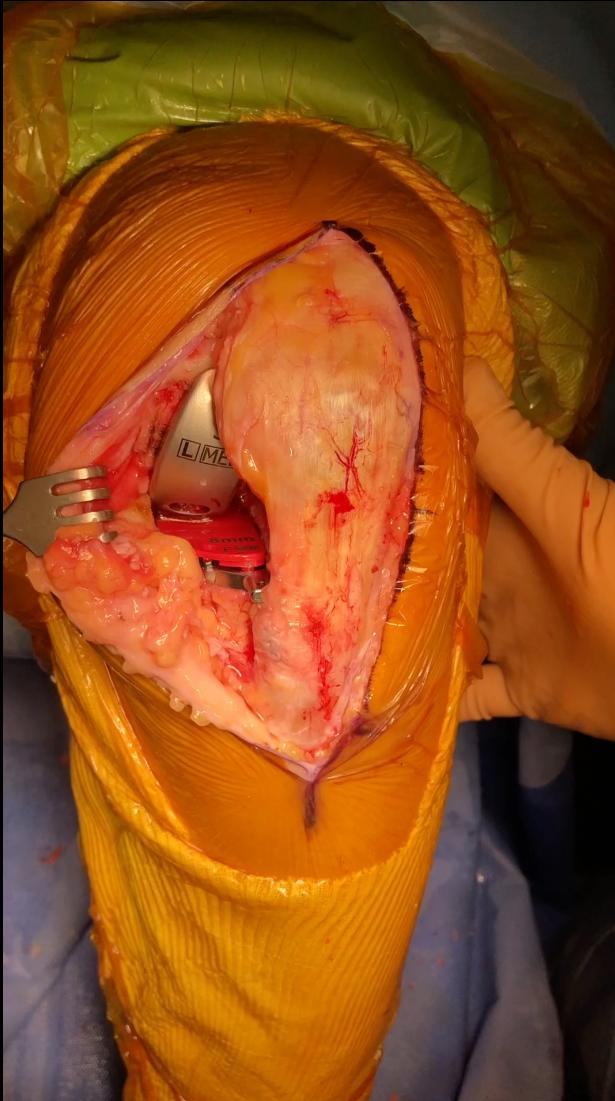
8. Alignment of the Femoral Component : In Flexion = Rotation



9. Size = No Overhang



10. Final Control before Implantation



Take Home Message

- ✓ Patient Selection
- ✓ Implant Selection
- ✓ **Selective Surgery**
 - ✓ Tibial Cut : Do It Right!
 - ✓ Slight laxity
 - ✓ No overhang
- ✓ **Implant survival : good positioning**



LYON **ORTHO** CLINIC