



**8<sup>th</sup> Advanced Course  
on Knee Surgery**



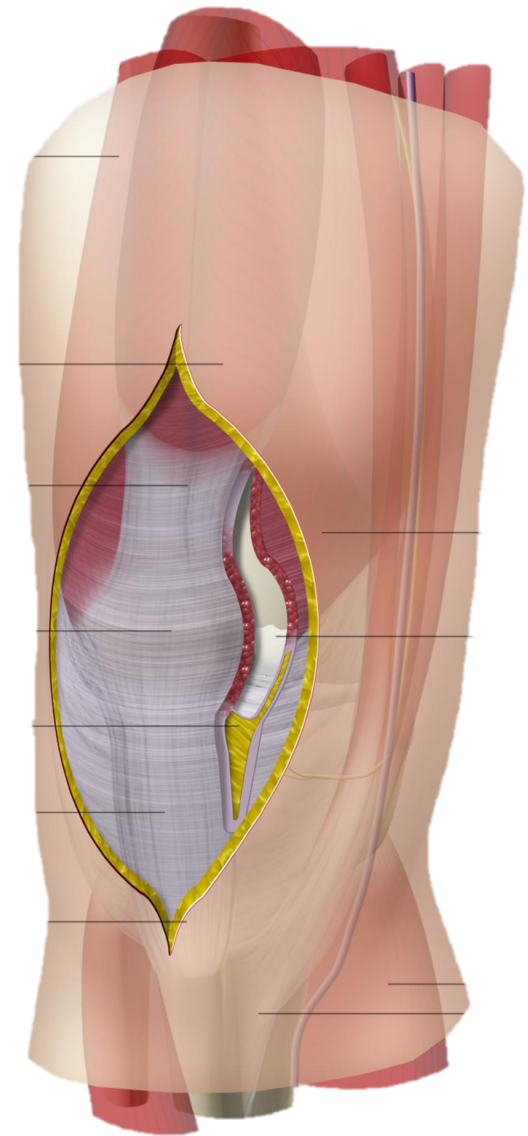
**Surgical tips and tricks for re-TKA**

***Implant/cement removal***

*Francesco Benazzo*

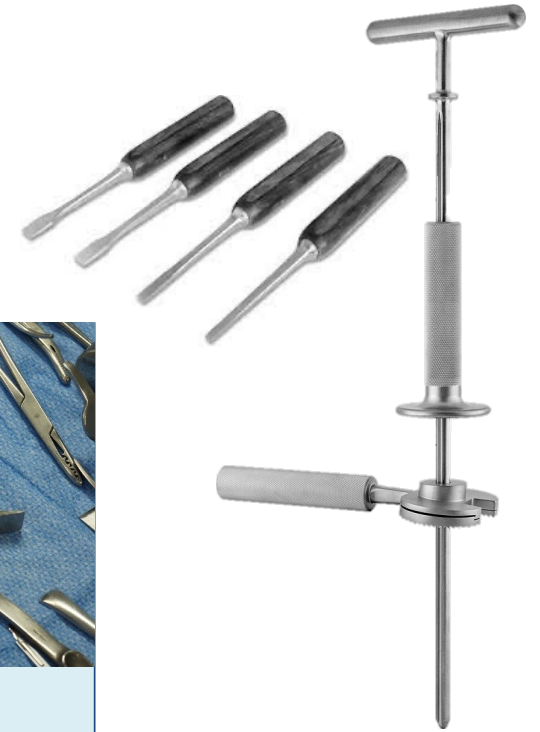
# Exposure

- Adequate exposure to avoid injury to the collateral ligament structures, extensor mechanism avulsion, or bone fractures during removal
- No role for minimal access surgery
- To safely remove the implants, the surgeon must access the prosthesis-bone interface
- A surgeon who spends time obtaining adequate exposure should achieve a less destructive implant removal. Typically, the surgical exposure equates directly to implant interface access.

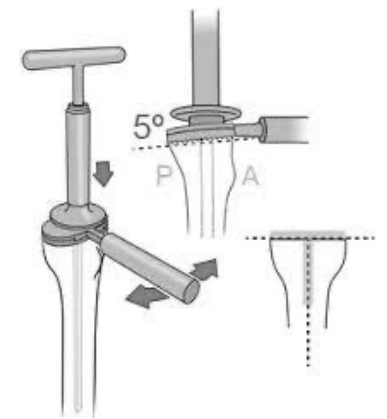




# Instrumentation



- Osteotomes and Chisels
- Disimpaction punches
- Component extraction devices
- Power saw → my choice of preference
- Thinner and smaller saw on femoral side
- Gigli saw → not my choice of preference
- Occasionally, manufacturer specific extraction tools are available
- Surgeons should be familiar with the implants that are being removed and contact the company sales representative for specific information regarding extraction tools

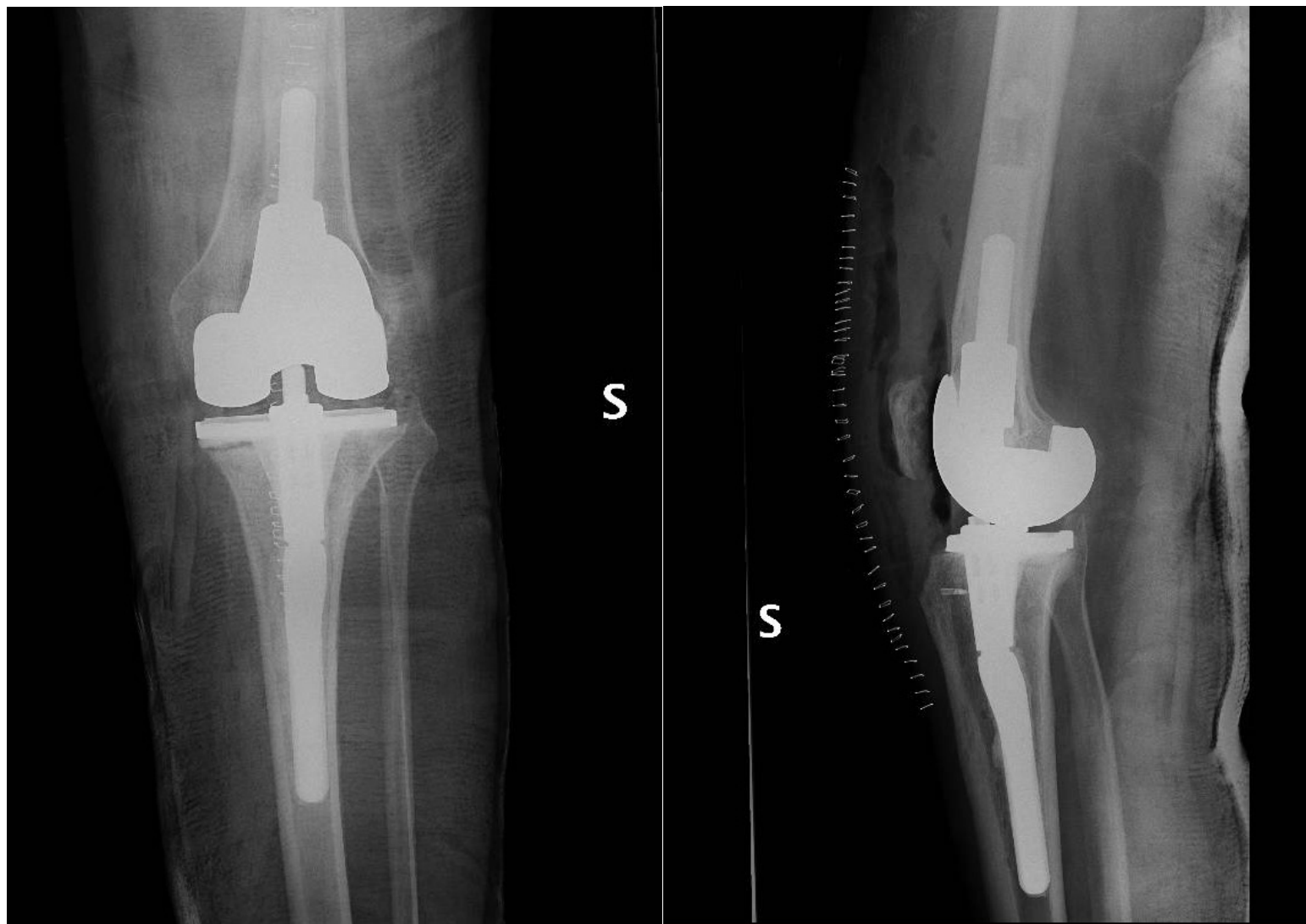
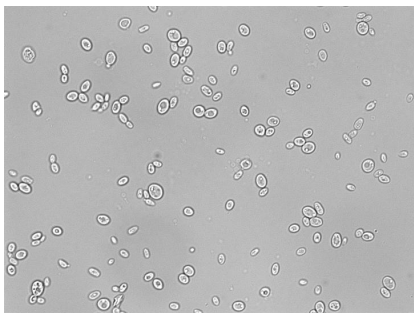


P.G.  
M,  
59 y

Candida  
Glabrata,  
Staph. Aureus  
infection

No sinus

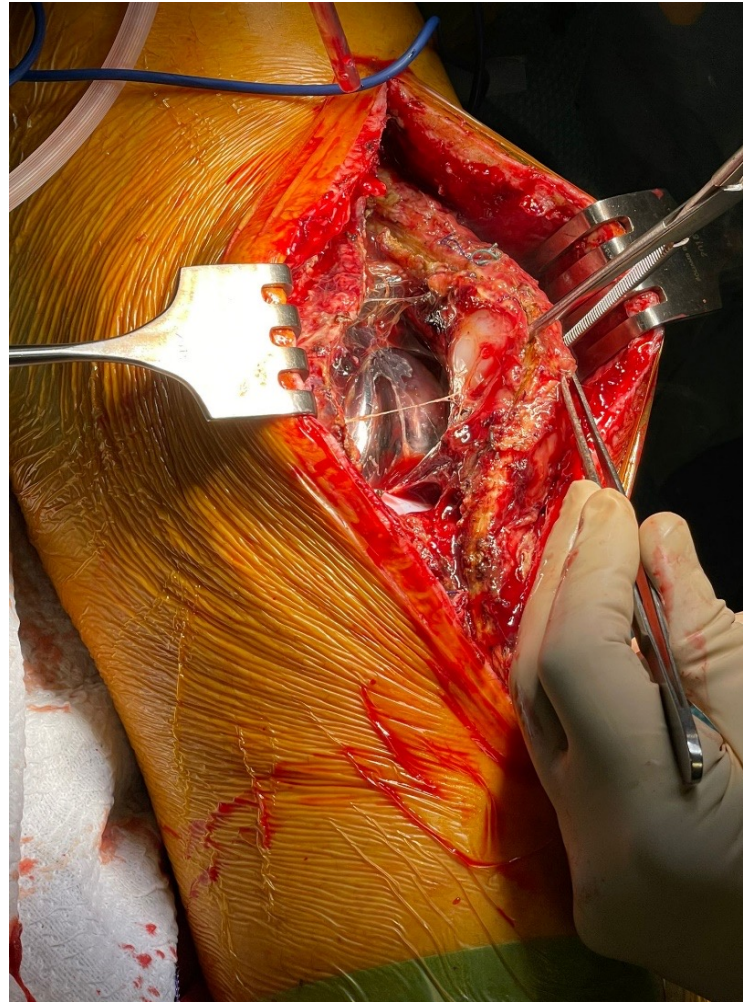
DAIR ineffective



# Evaluation of ROM, incision



# Patella removal



# Polyethylene removal

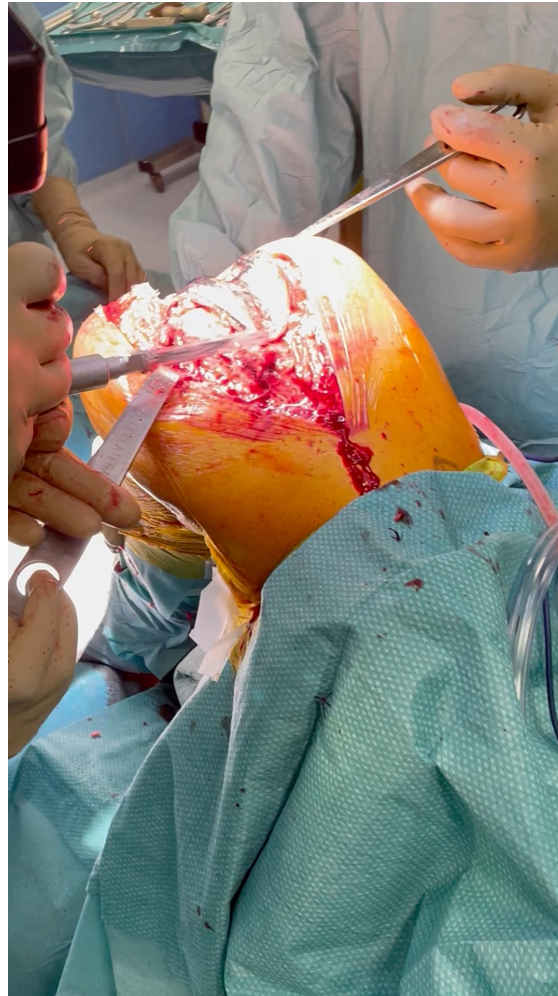
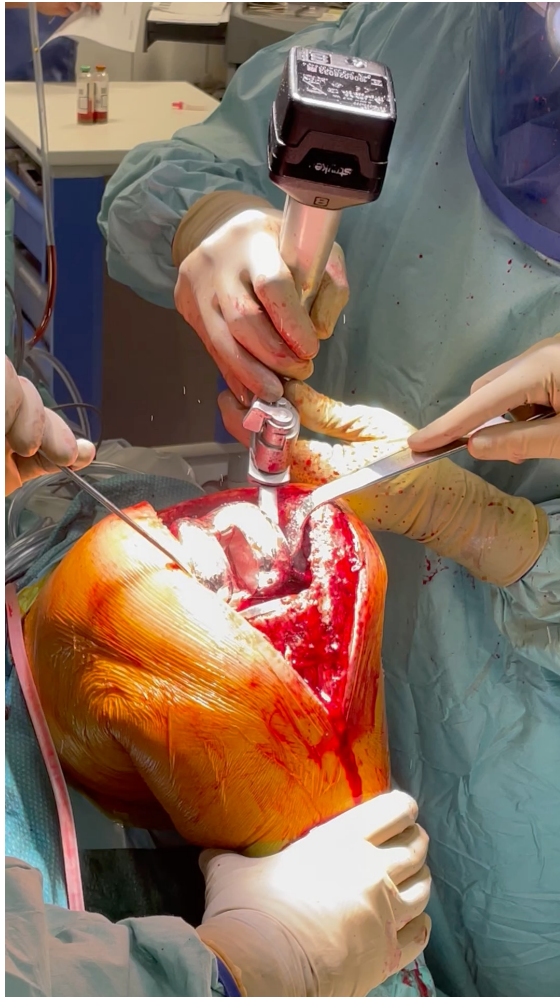


Femur





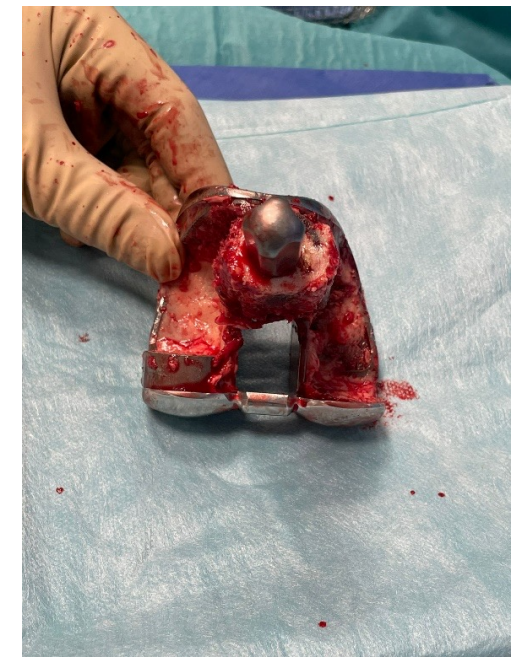
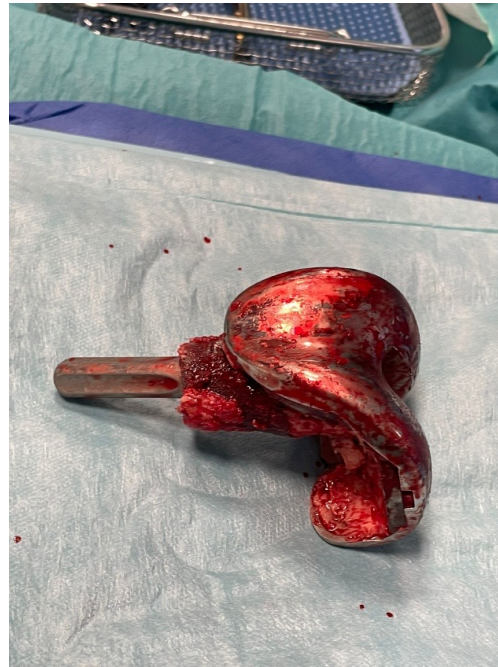
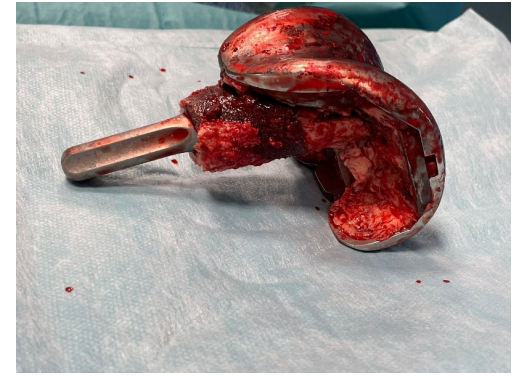
# Femur



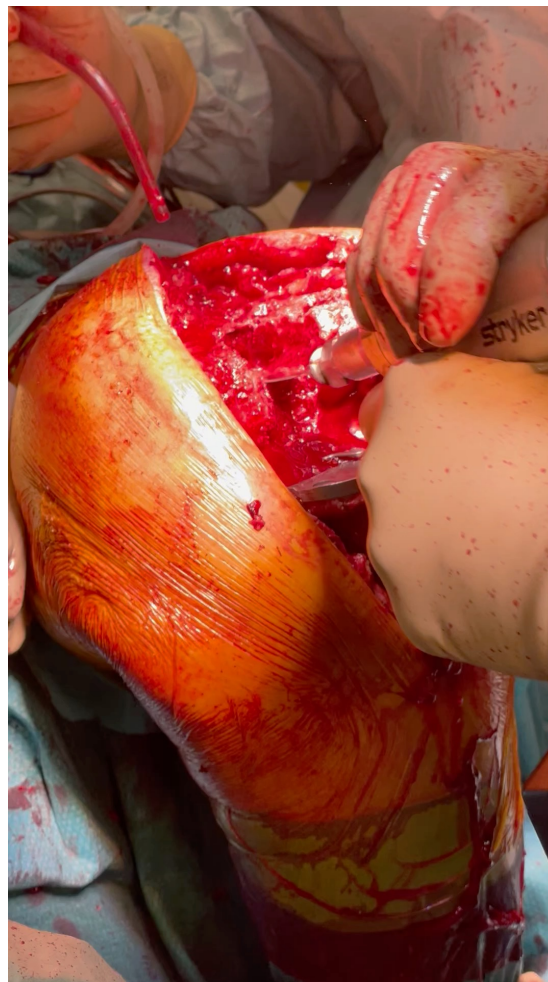
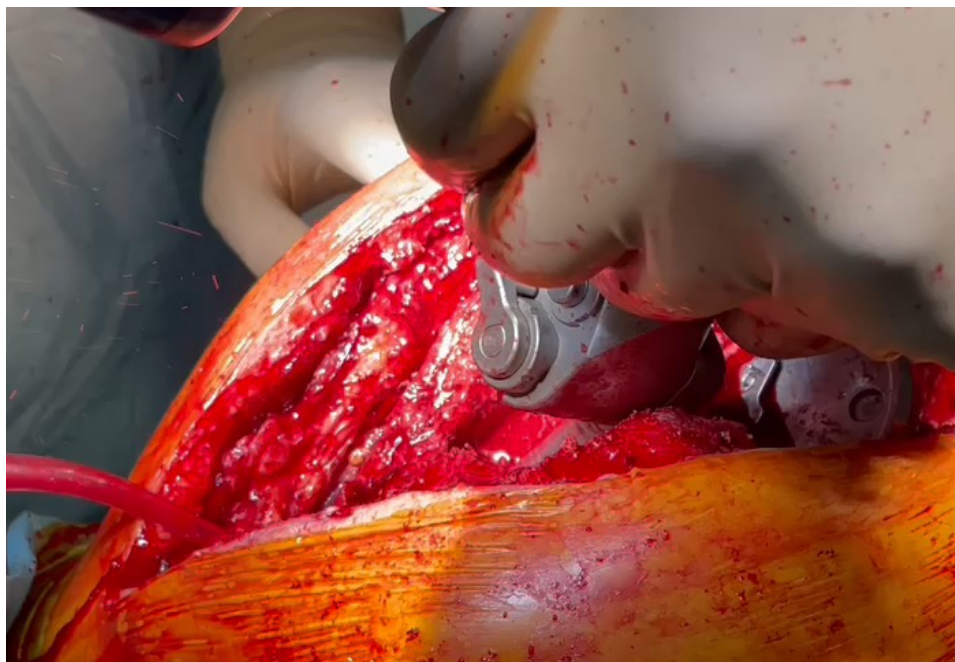
# Femur



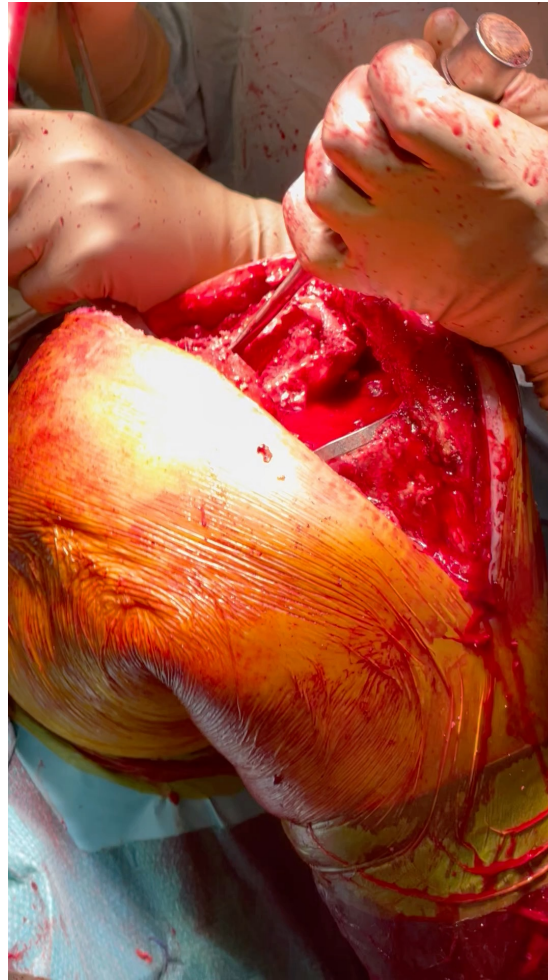
# Femur



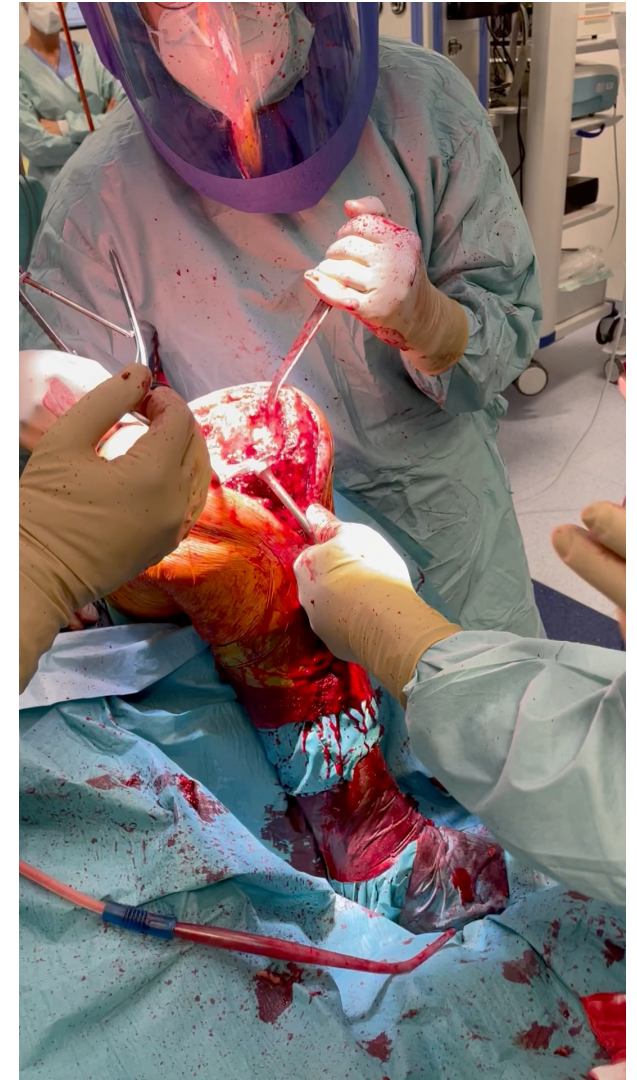
# Cement removal



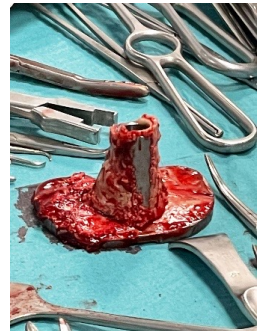
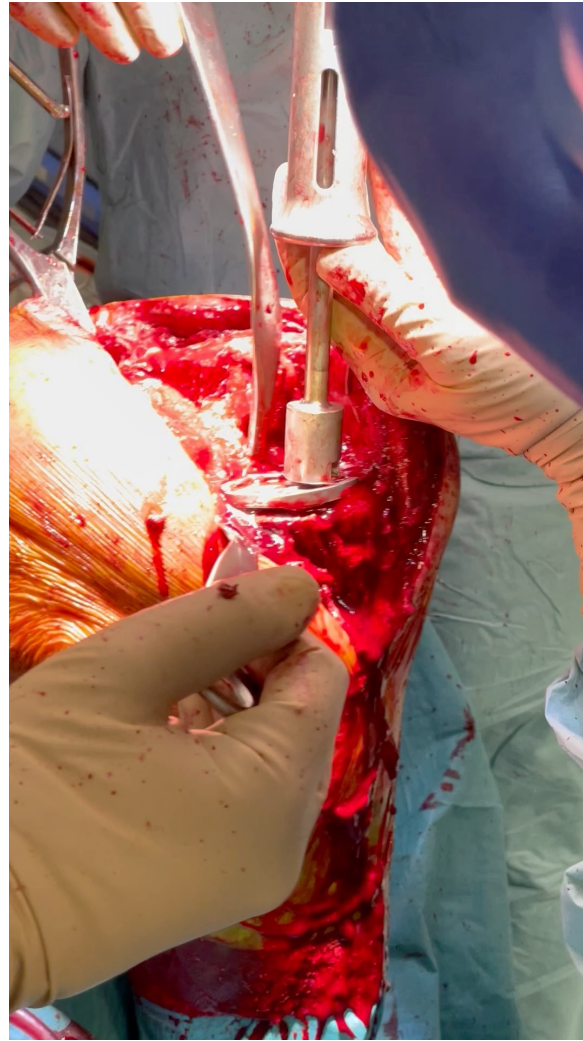
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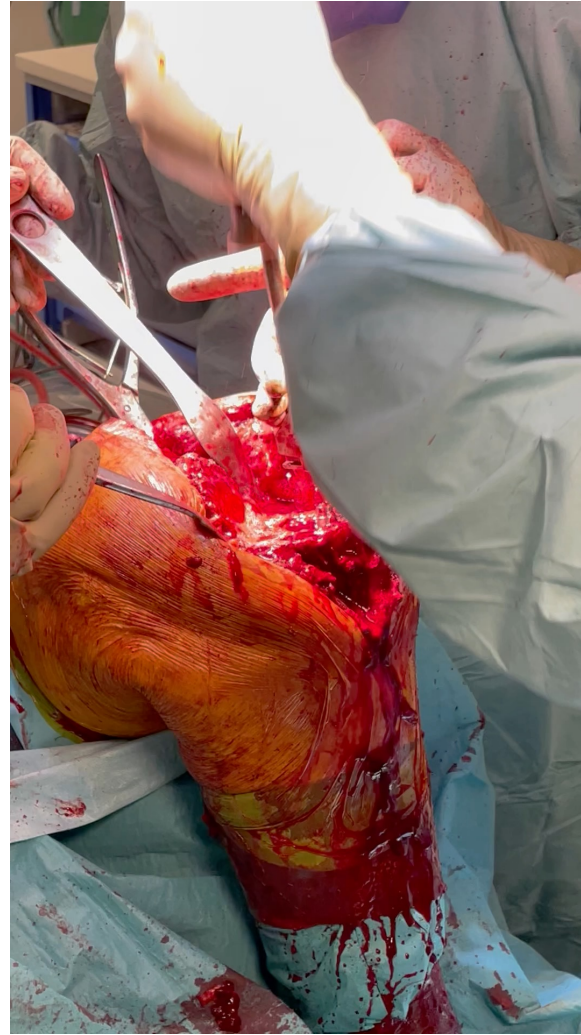
# Tibia



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ORIGINAL ARTICLE



## Customized intraoperatively molded articulating cement spacers for two-stage revisions TKA with major bone defects

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# Take home message

- Adequate exposure
- Good access to the prosthesis-bone
- Knowledge of instruments and tools
- Experience
- Patience

