Advanced knee surgery 2025

PFJR: Trochlear dysplasia

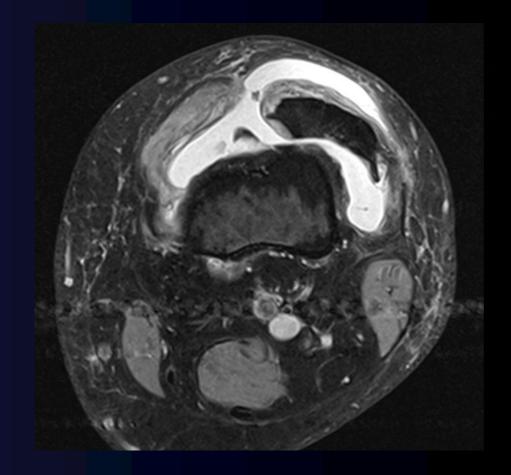


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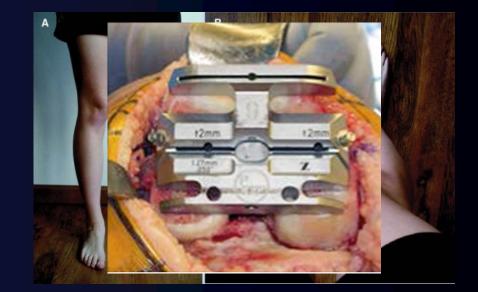
Trochlear dysplasia

- Commonly associated with isolated PFJ OA
- There may be a history of prior PFJ instability
- Consider pre-op radiographs
- Chronic dislocation uncommon



Patella stability

- Trochlear rotational profile
 - Trochlear component rotation / translation



Patella stability

- Femoral rotational profile
 - Femoral component rotation / translation
- Trochlea shape and depth
 - Trochlear component design
 - Inlay vs onlay

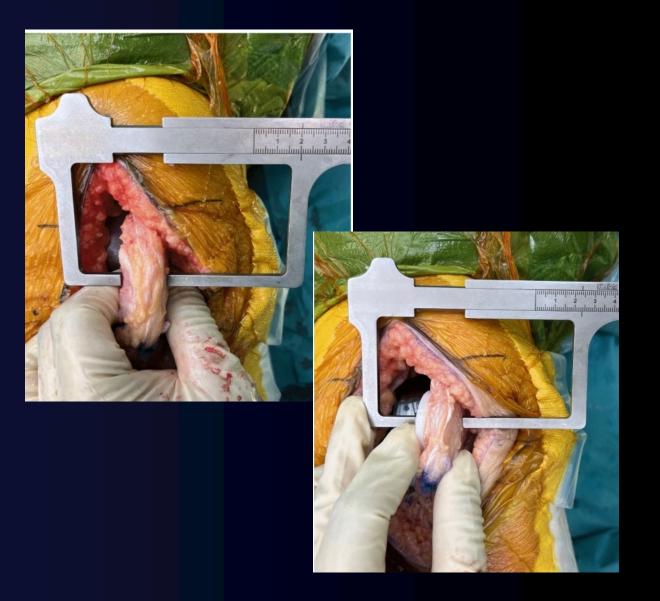


Patellar resurfacing

 Measure pre-resection thickness

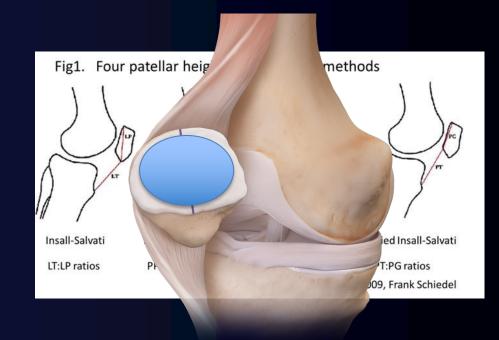
 Remove same thickness as replacing

Do not resect beyond residual 12mm



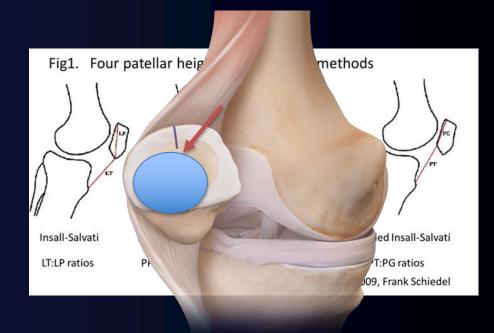
Patella resurfacing

- Femoral rotational profile
 - Femoral component rotation / translation
- Trochlea shape and depth
 - Femoral component design
- Patellar height
 - Patellar button distalisation



Patella stability

- Femoral rotational profile
 - Femoral component rotation / translation
- Trochlea shape and depth
 Femoral component design
- Patellar height
 - Patellar button distalisation



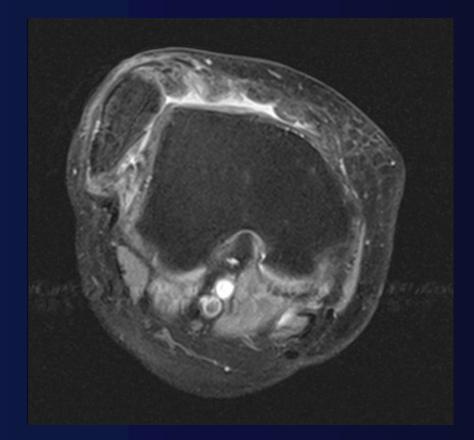
Case 1 – 47 yo female

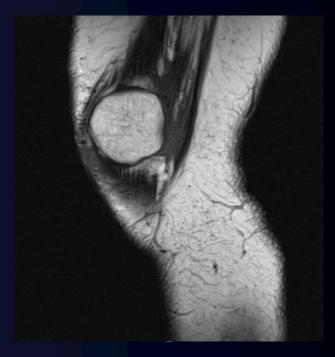










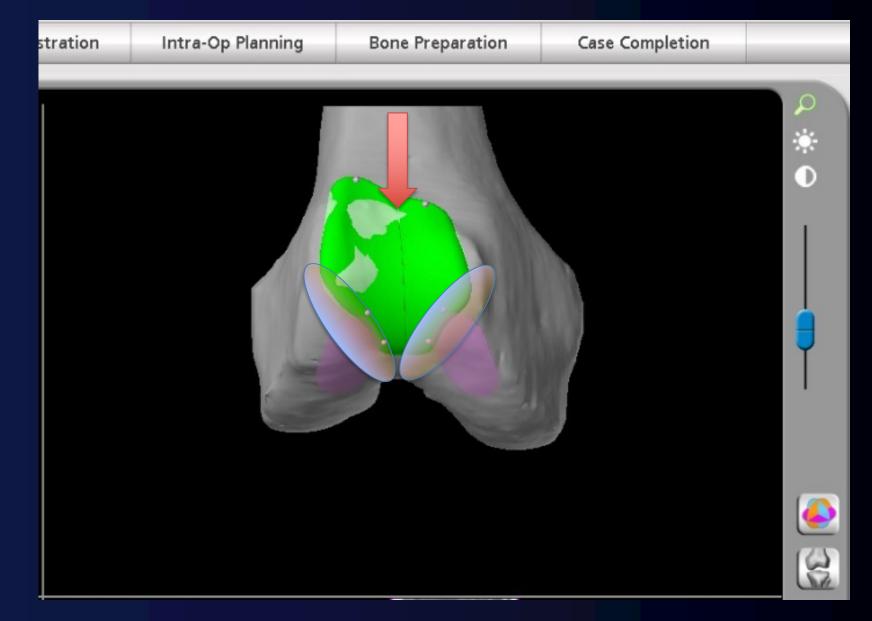


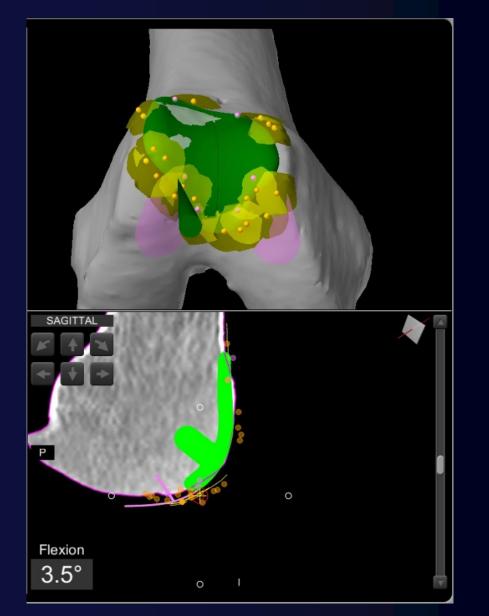
Case 1

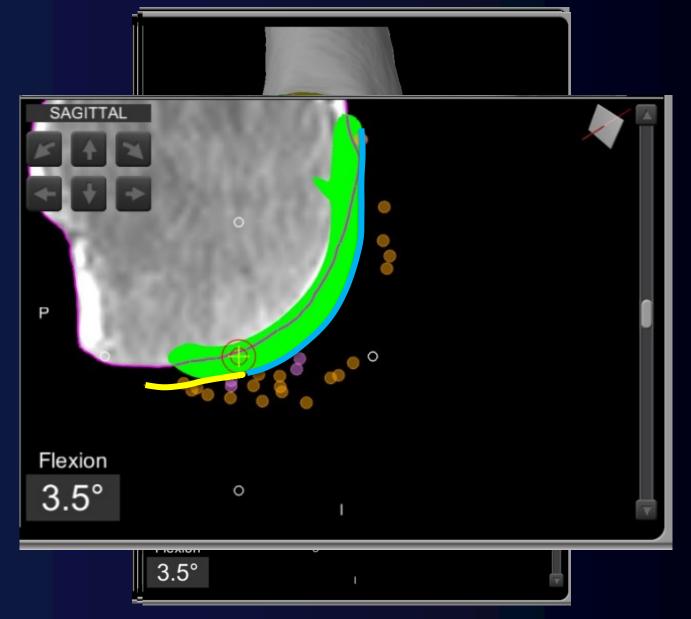




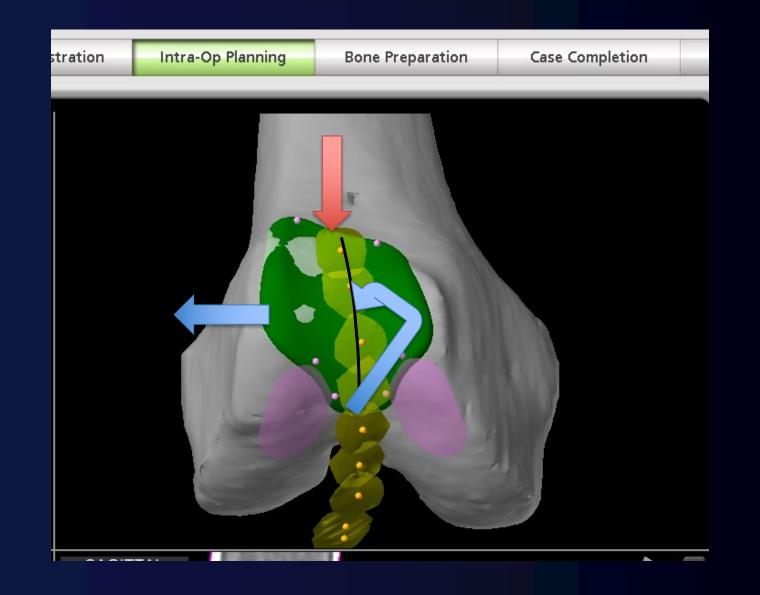
Avon PFJR + MPFL 2017



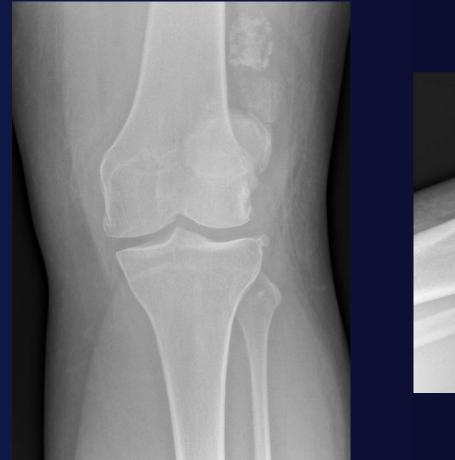




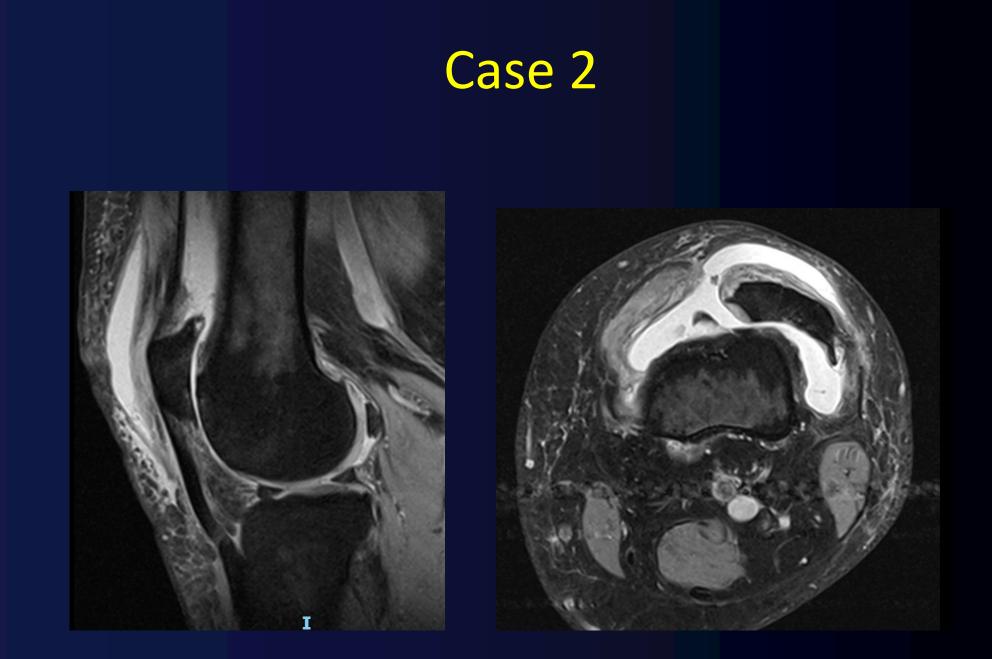




Case 2 – 39 yo female







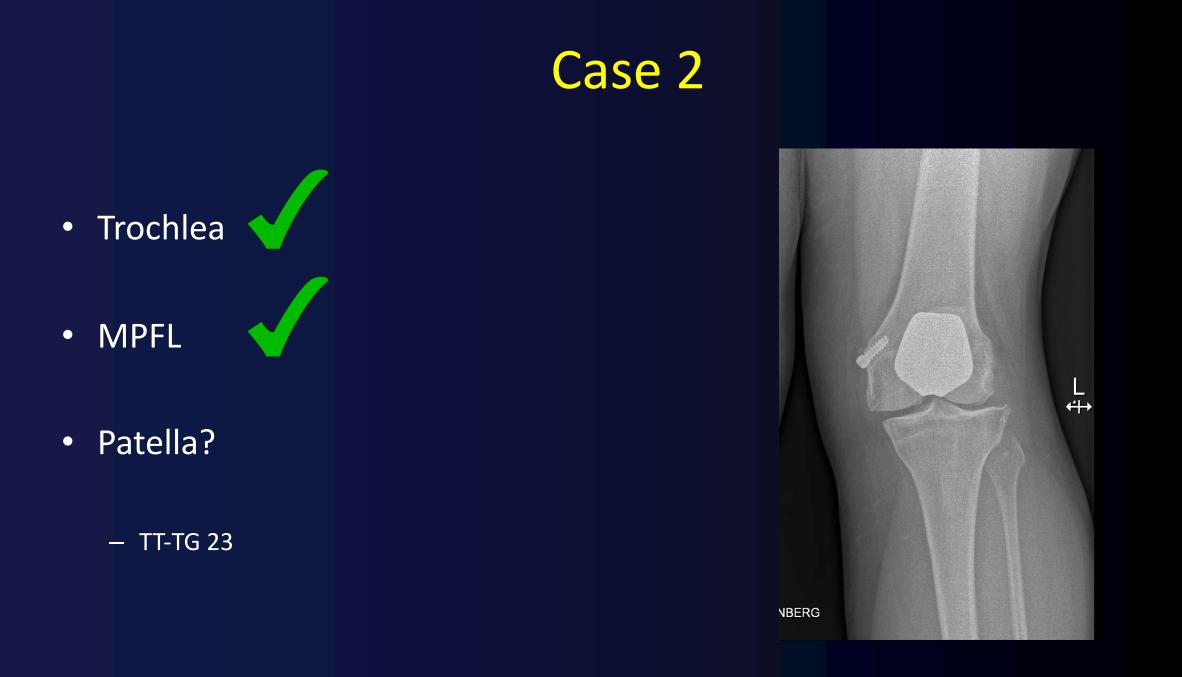




Case 2

- Persistent maltracking
- Bothersome clicking
- Revision to TKR?
- Instability paradigm...



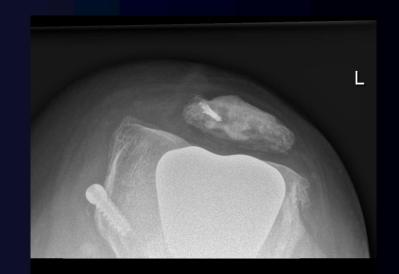






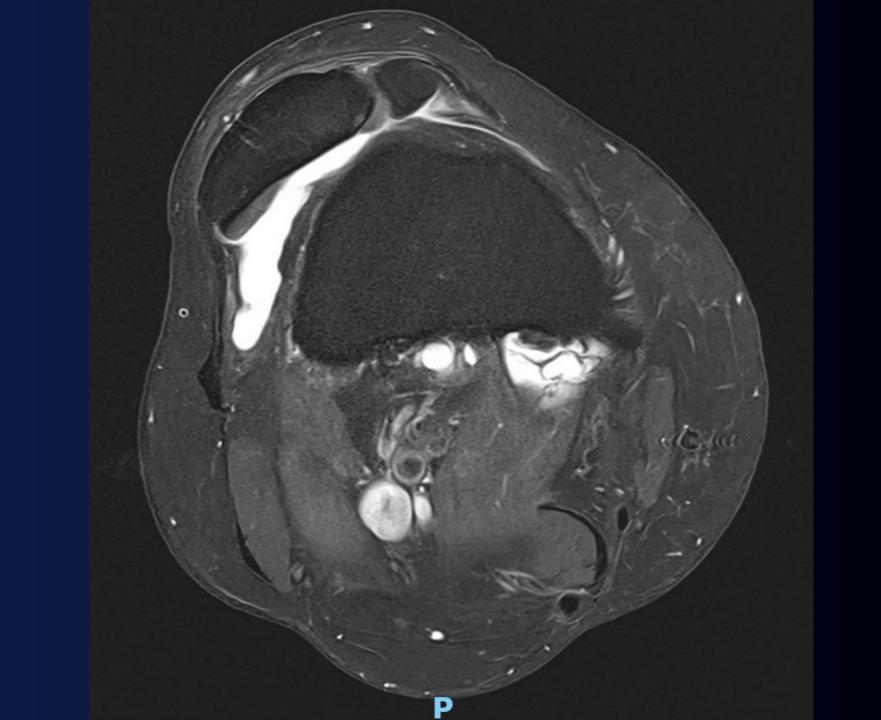


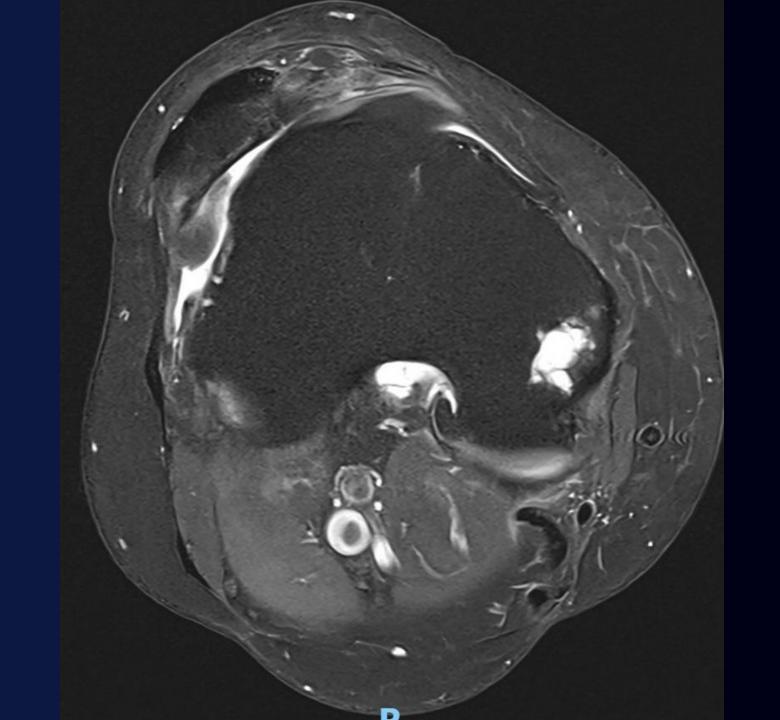


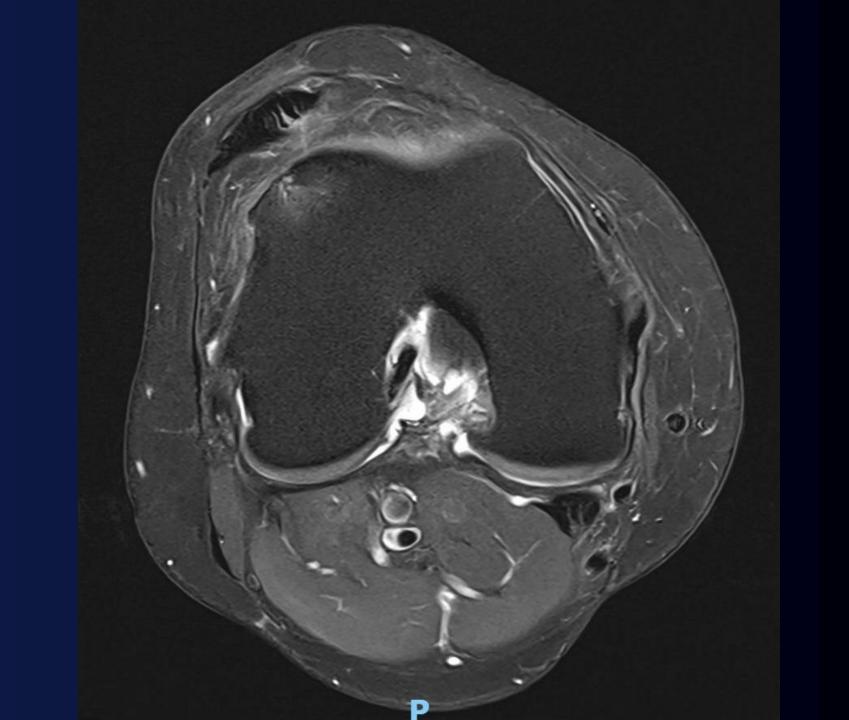


Case 3 – 42 yo female

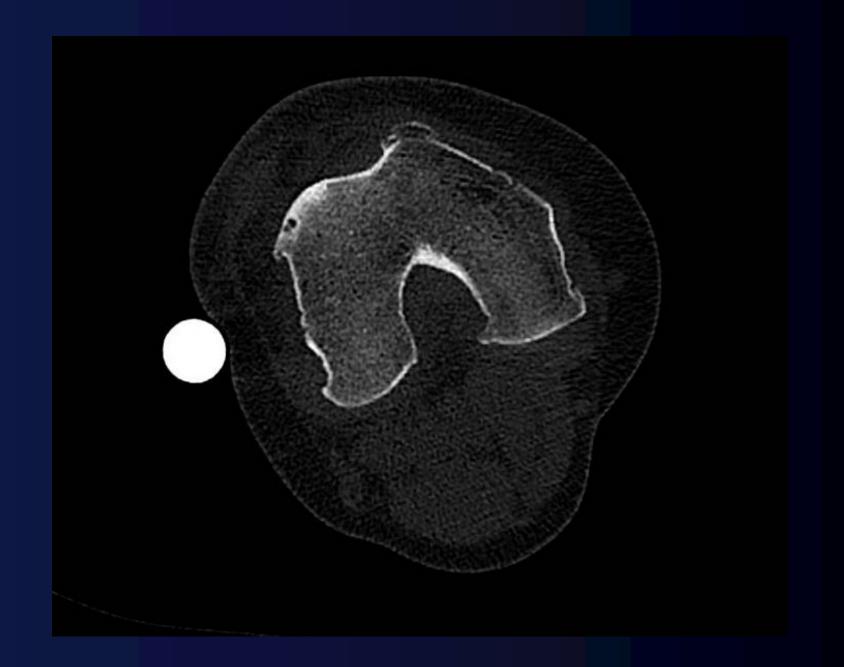


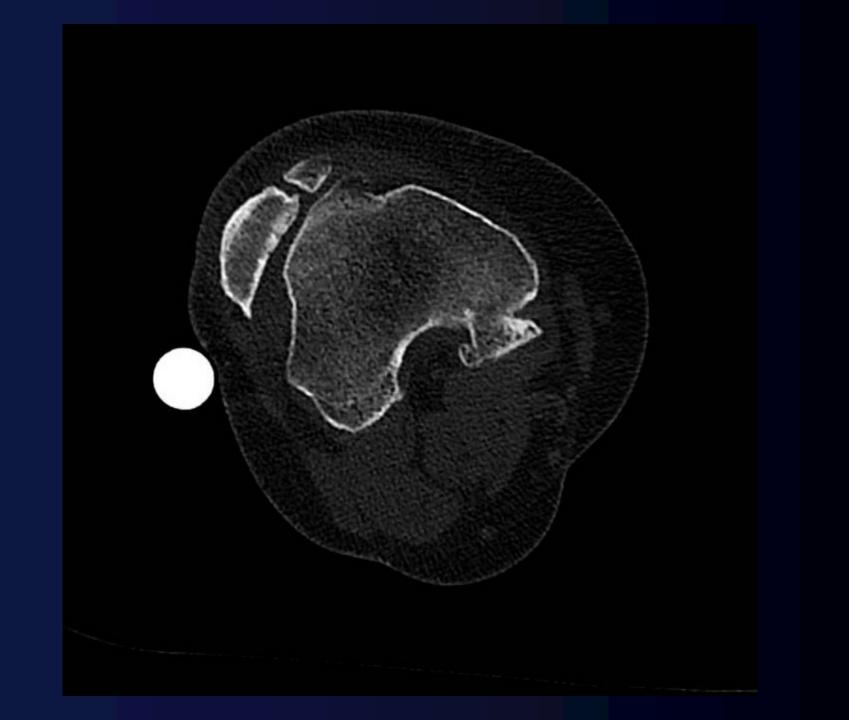


















Conclusions

- OA is the end point for trochlear dysplasia
- This is often isolated to the PFJ
- PFJR is an attractive proposition
- Create a trochlear with the implant
- Concentrate on tracking and transition
- Follow a stabilization algorithm to achieve good results



Thank you



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