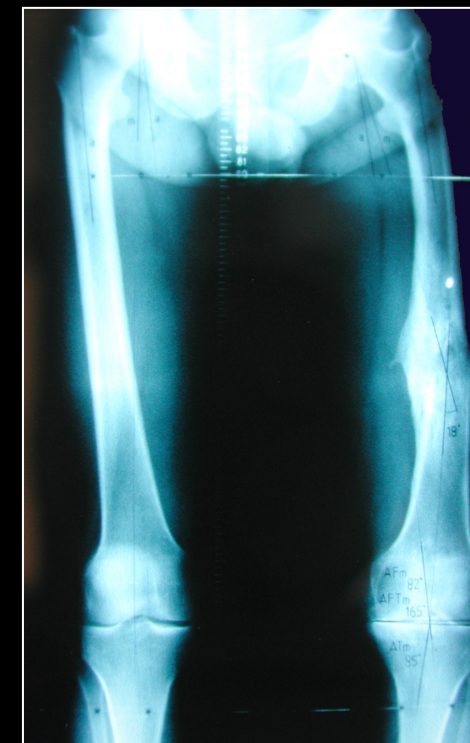


Sébastien LUSTIG MD, PhD, Prof

Cécile BATAILLER MD, Philippe NEYRET MD PhD, Elvire SERVIEN MD PhD,

Lyon North University Hospital – Lyon - FRANCE



Intra articular



Extra articular





Frontal plane

Sagittal plane

?

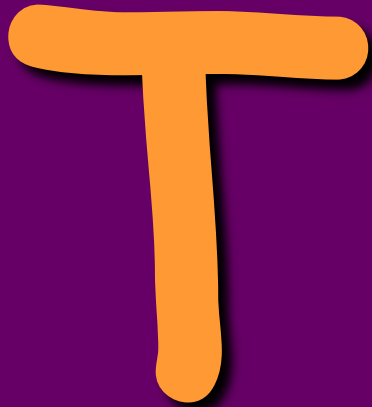
Axial plane

?

Step by step
3D Assessment of the deformity



Knee joint



frontal



Knee
joint



Sagittal



Knee joint



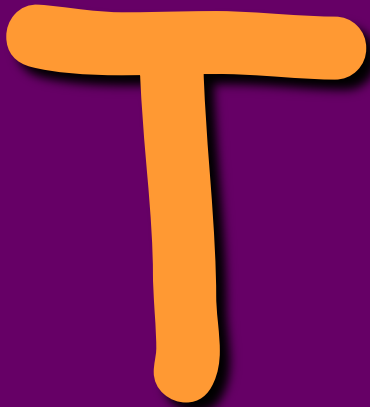
Horizontal







Knee joint



frontal



Knee joint



Sagittal

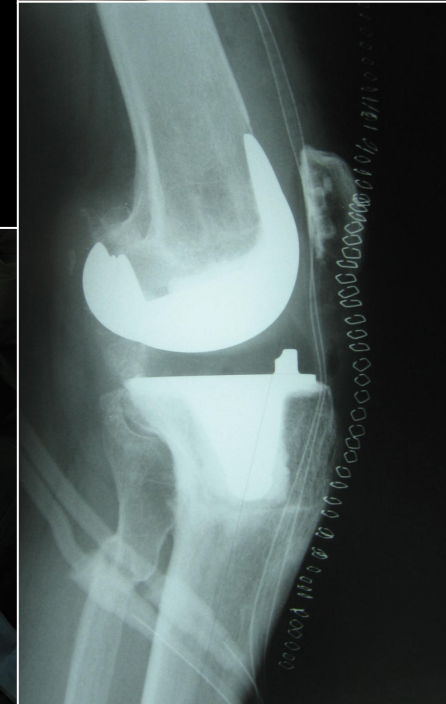
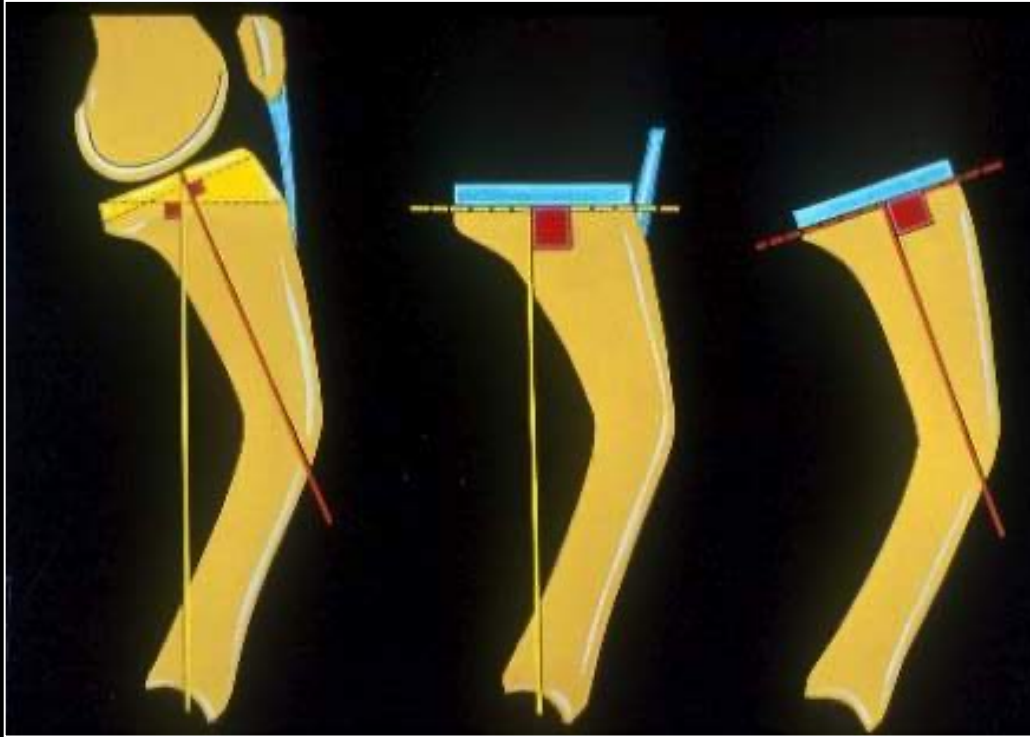


Knee joint



Horizontal

Sagittal Deformity



Sagittal Deformity

International Orthopaedics (SICOT) (2012) 36:1835–1839
DOI 10.1007/s00264-012-1580-z

ORIGINAL PAPER

Sagittal placement of the femoral component in total knee arthroplasty predicts knee flexion contracture at one-year follow-up

Sebastien Lustig · Corey J. Scholes · Tim J. Stegeman ·
Sam Oussedik · Myles R. J. Coolican · David A. Parker



Recurvatum



> [J Arthroplasty](#). 2021 Sep;36(9):3154-3160. doi: 10.1016/j.arth.2021.04.020. Epub 2021 Apr 24.

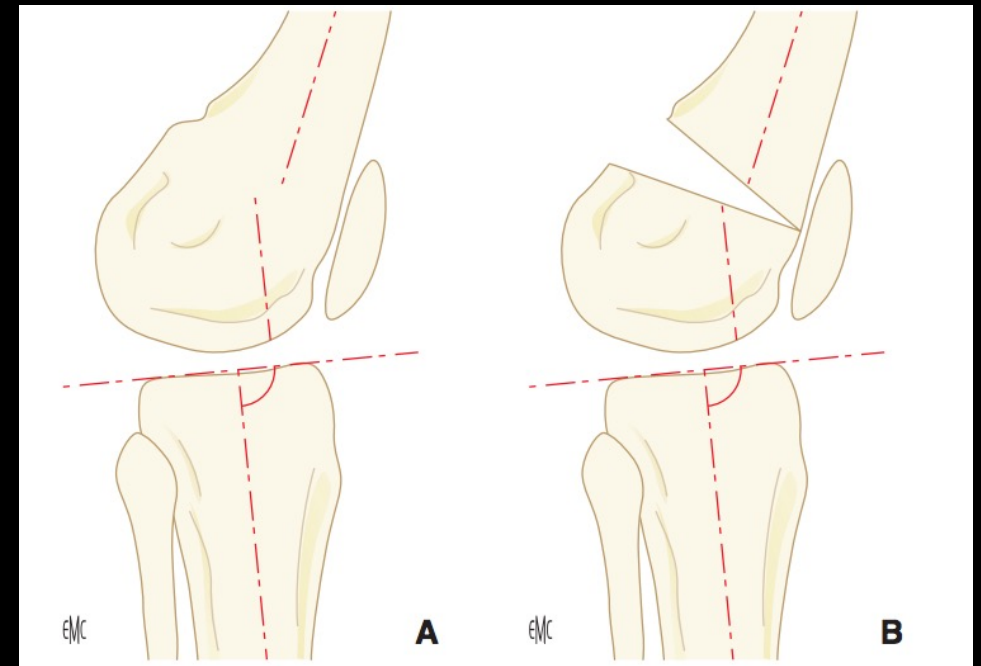
Posterior-Stabilized TKA in Patients With Severe Genu Recurvatum Achieves Good Clinical and Radiological Results at 5-year Minimum Follow-Up: A Case-Controlled Study

[Guillaume Mesnard](#)¹, [Cécile Batailler](#)², [Camdon Fary](#)³, [Axel Schmidt](#)¹, [Elvire Servien](#)⁴,
[Sébastien Lustig](#)²



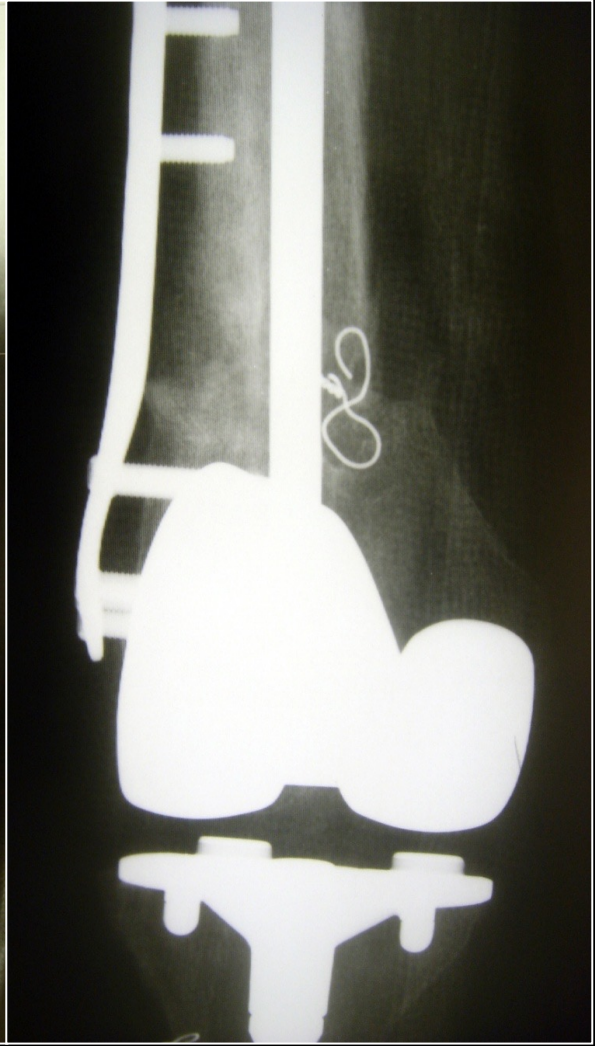
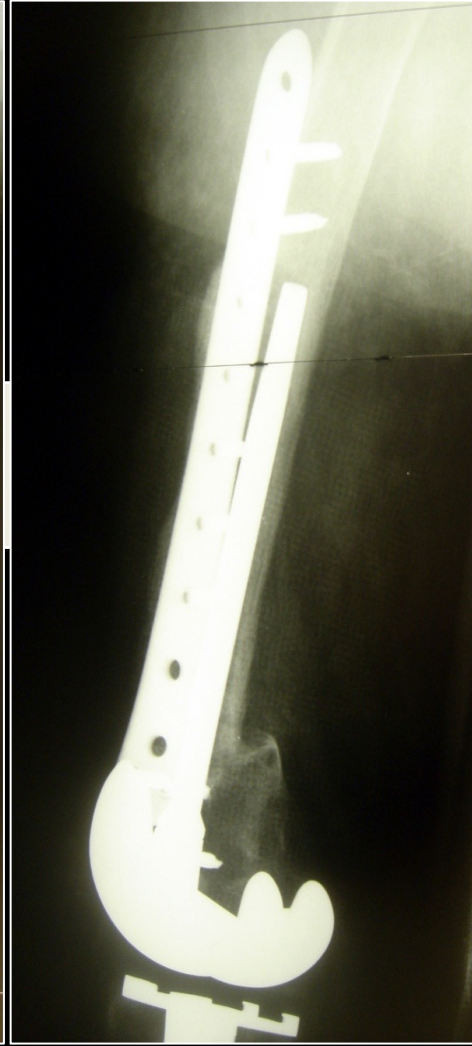
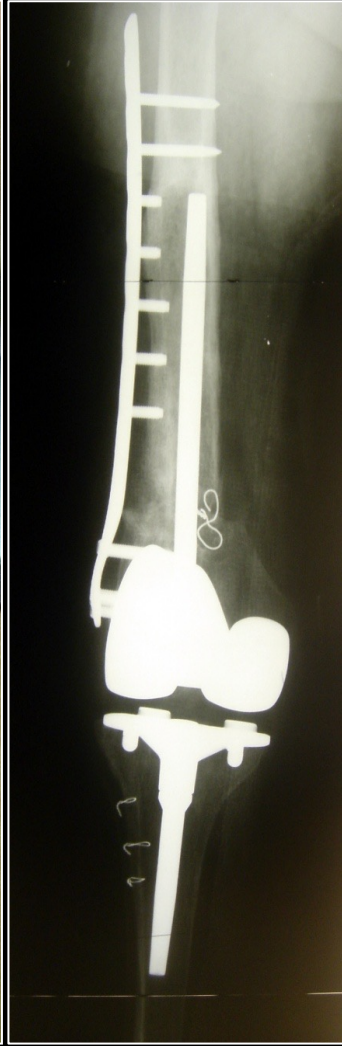


*Combining
a DFO with a
TKA ?*



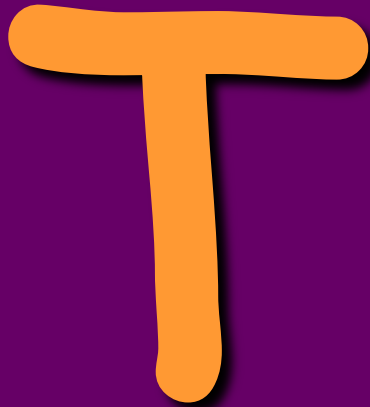
Not always a slam dunk







Knee joint



frontal



Knee joint



Sagittal



Knee joint



Horizontal

OA after axial plane (rotational) malunion

Femoral *external* rotation —→ medial OA

Femoral *internal* rotation —→ lateral OA



Sometimes Obvious



Sometimes Tricky



30° external rotation !

HORIZONTAL DEFORMITY



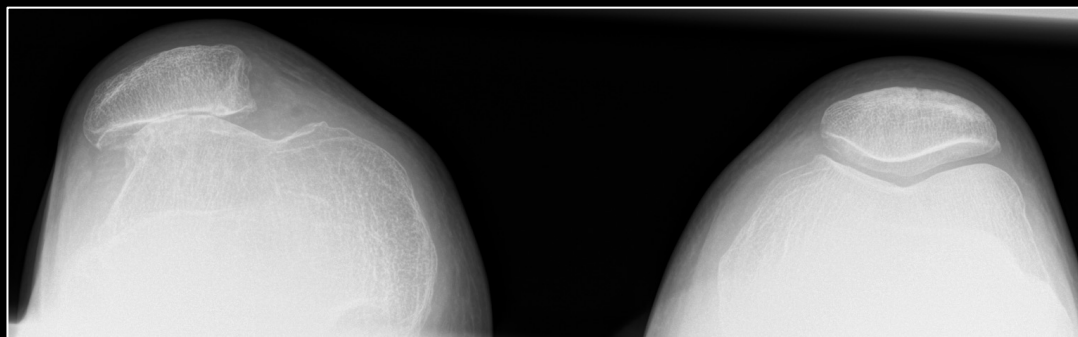
81 OA on malunion

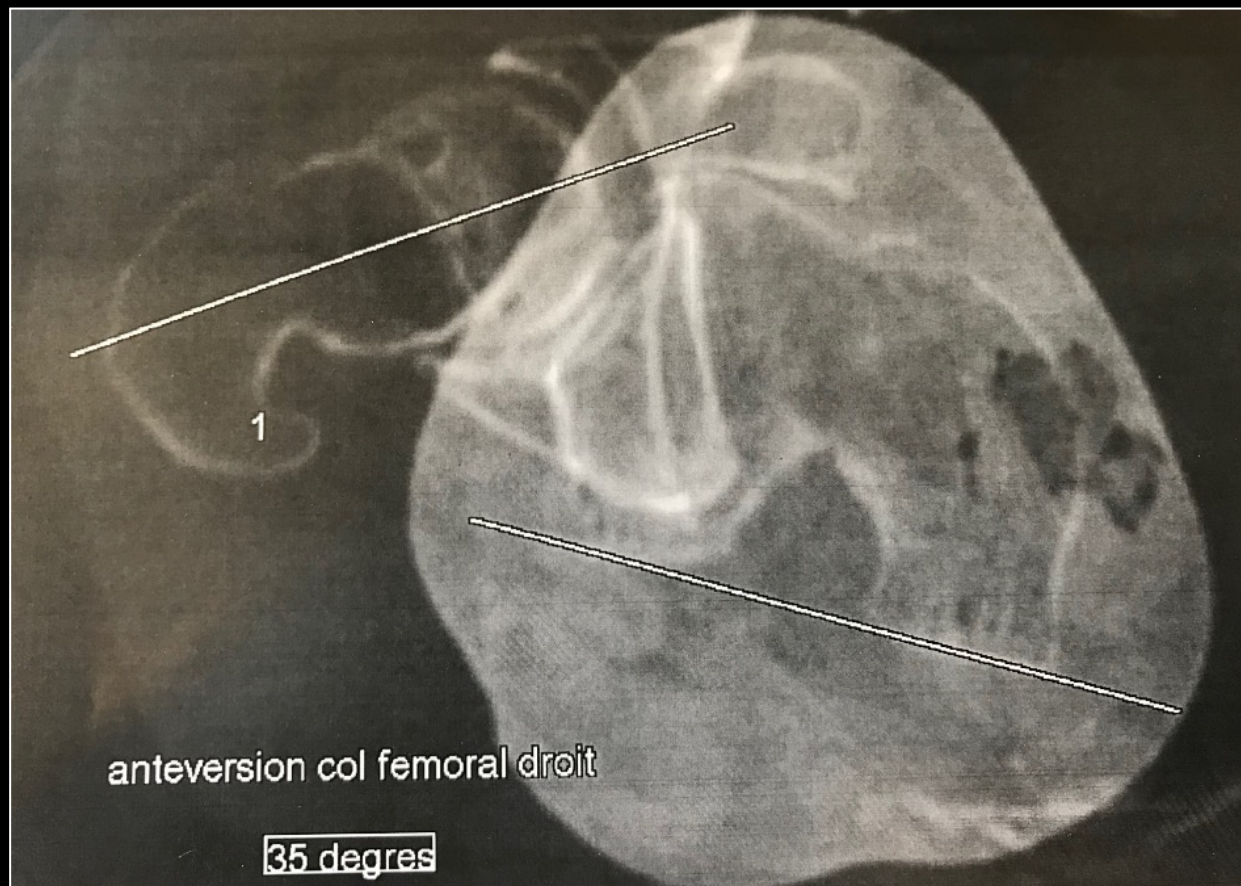
- Rarely isolated
- Femur : external torsion 6 cases (6 MFTOA)
internal torsion 1 case (1 MFTOA)
- Tibia : internal torsion 1 case

Limit \leftrightarrow 20°

→ Rotational osteotomies = 2 (20° and 25°)

→ TKA = 6 (7° to 13°)

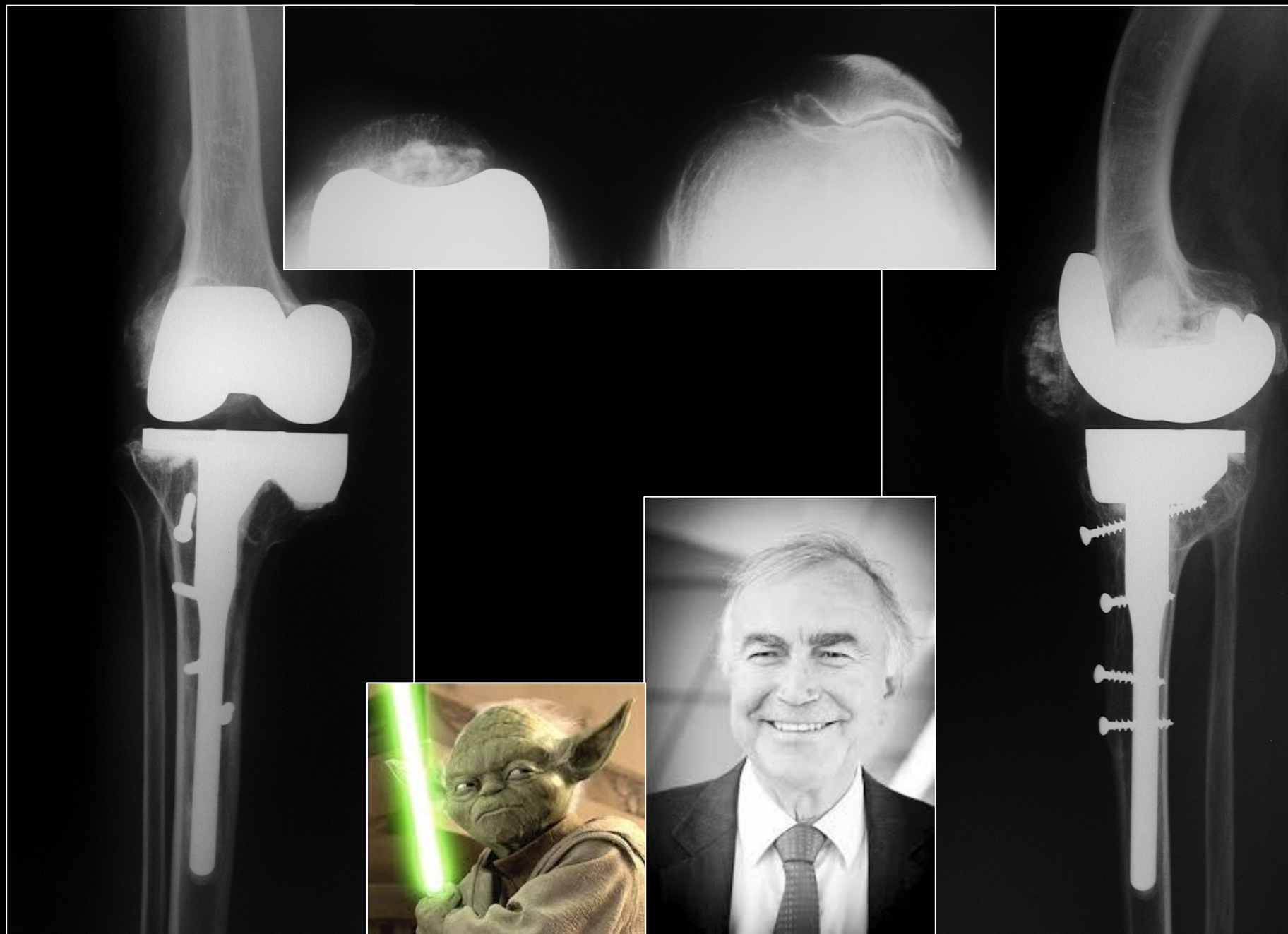




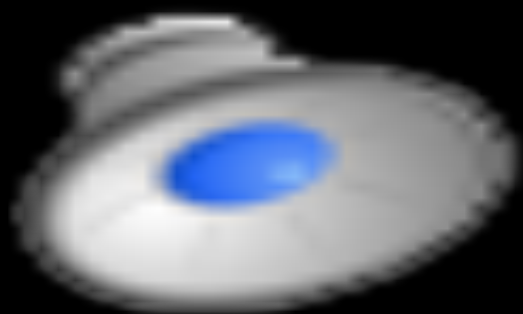




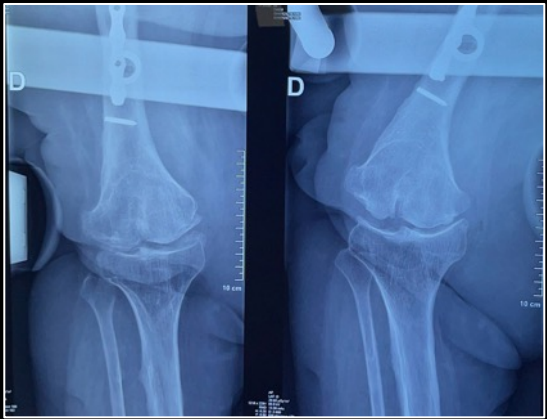
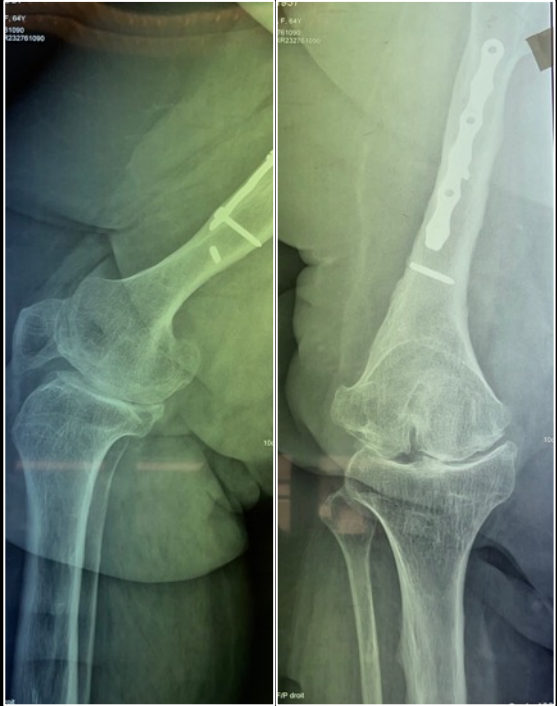




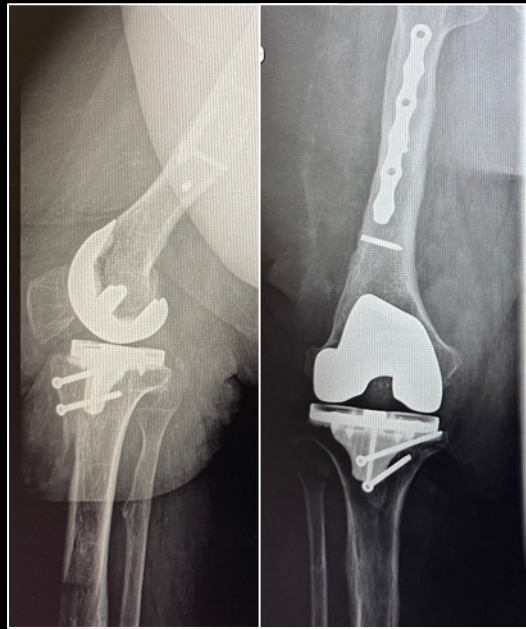
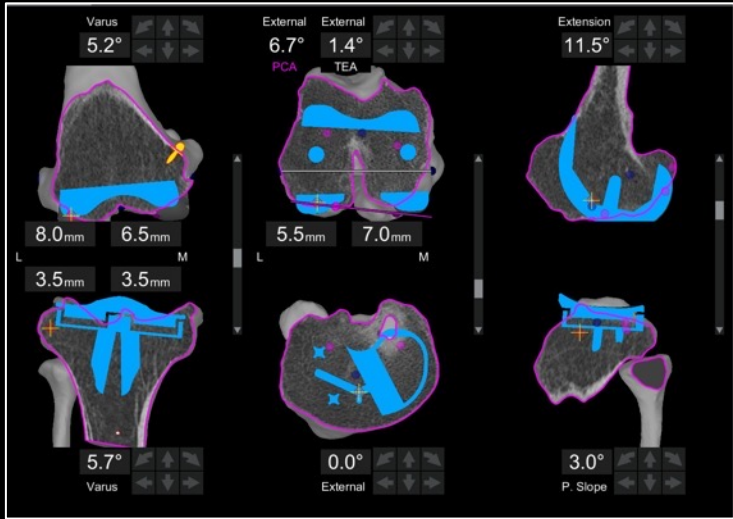
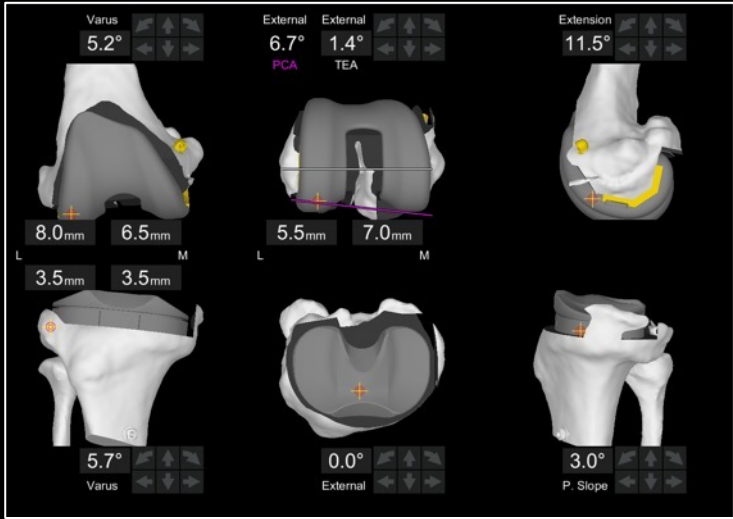






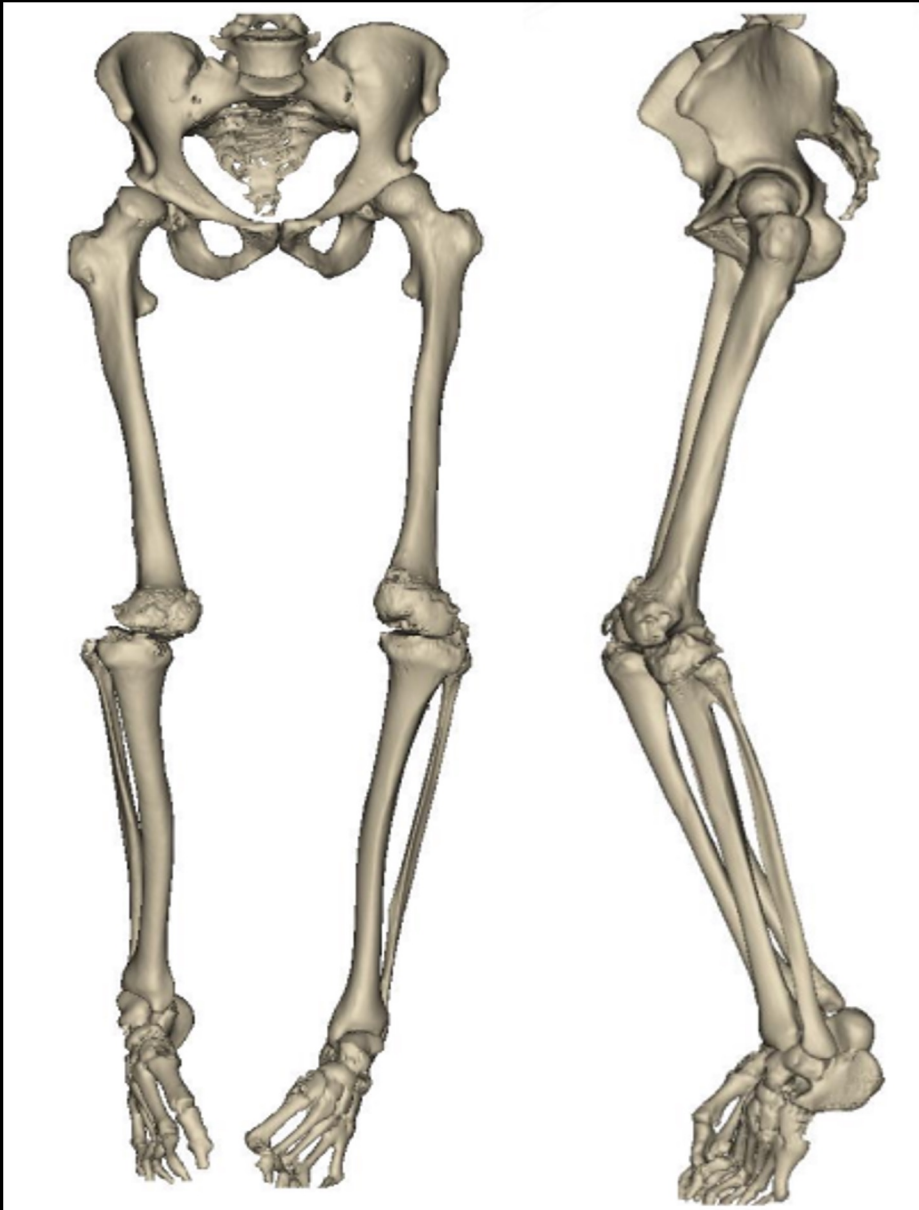


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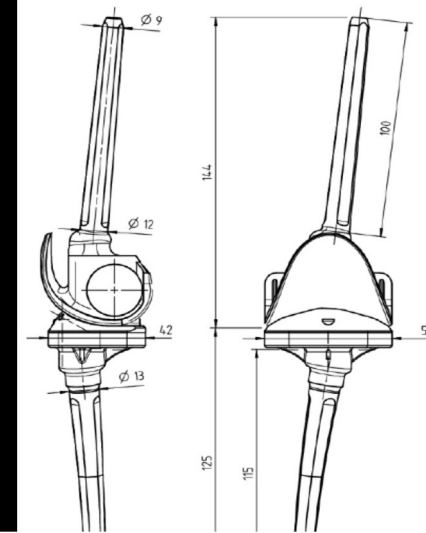


TAR syndrom





3D PLANNING



Take Home Message

- 3D ASSESSMENT IS MANDATORY,
- 1 STAGE VS 2 STAGE,
- SAGITTAL DEFORMITY CAN BE TOLERATED,
- ROTATIONAL MALUNION $>20^{\circ}$ NEEDS TO BE ADDRESSED
- CUSTOM IMPLANT FOR EXTREME CASES



Thank You

