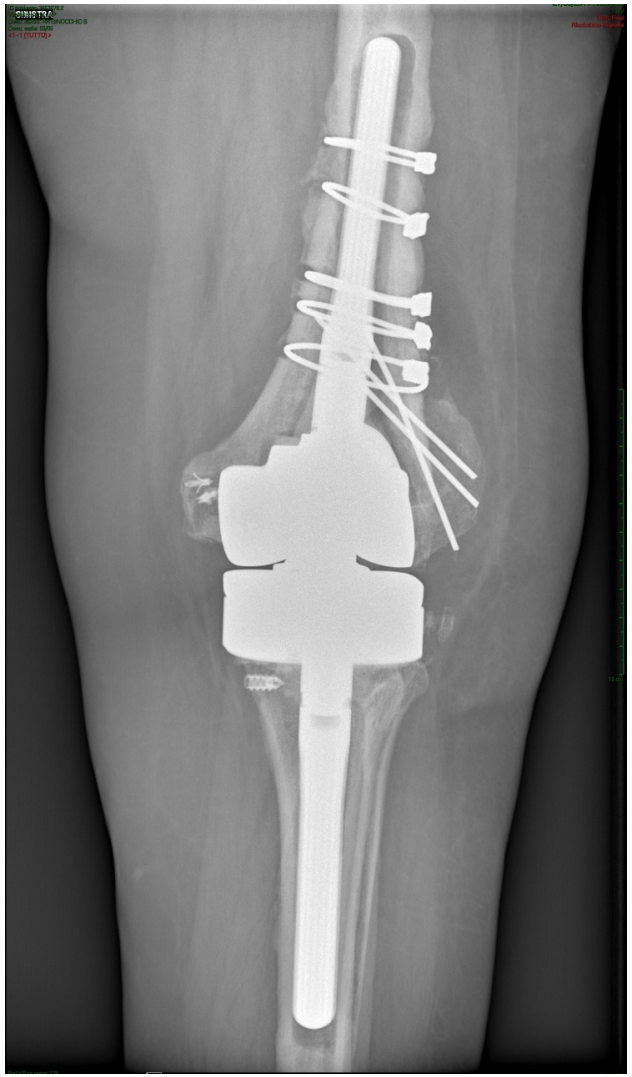
HUMANITAS UNIVERSITY

Complex TKA Revisions

Prof. M. Marcacci

Sept 2011: PCR: 0.29, VES: 29

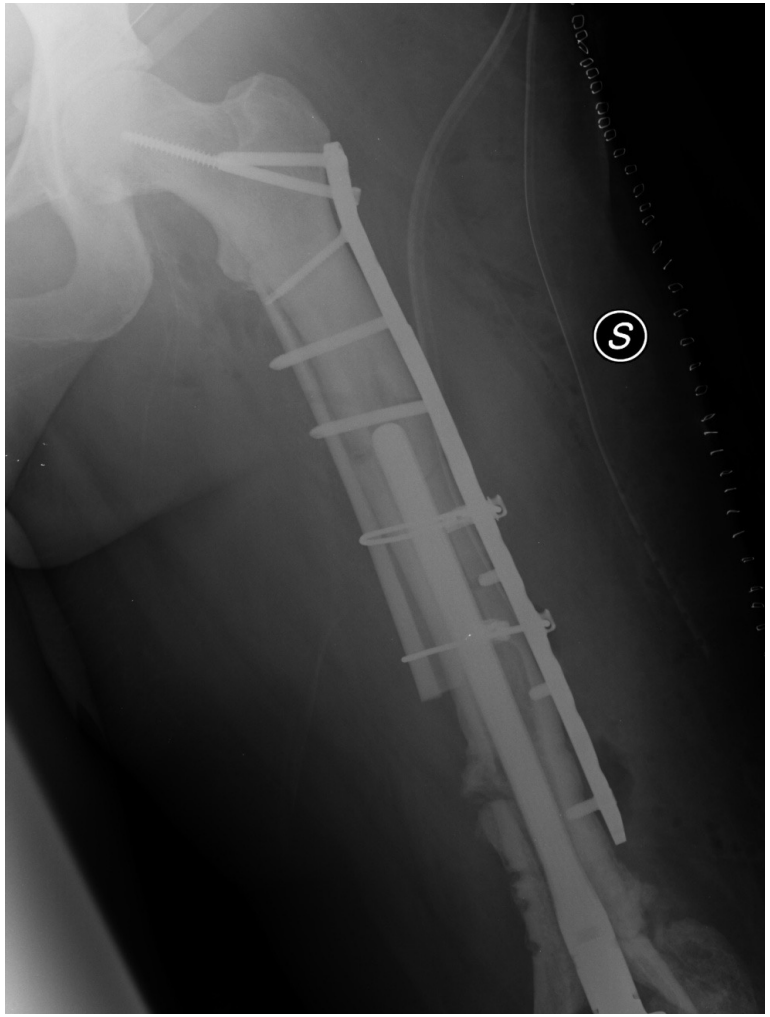


Sept 2011: Radical Explant

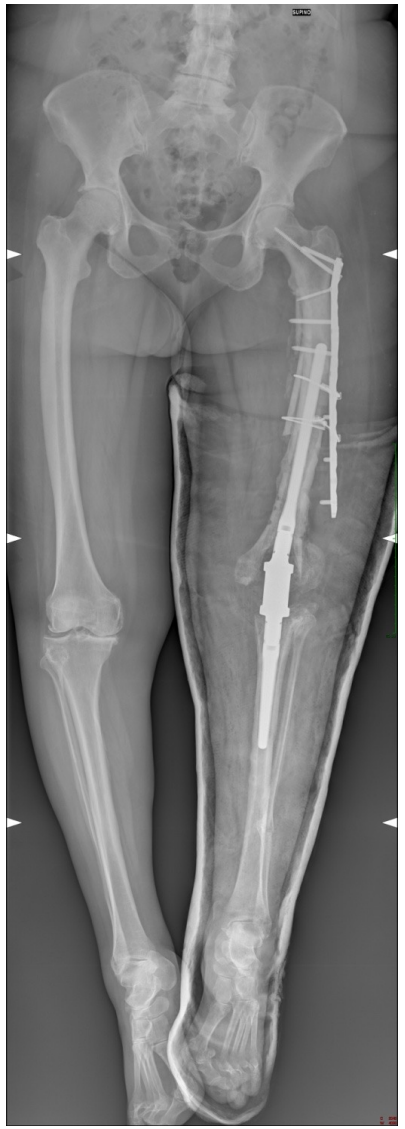
Febr 2012: Leukocyte Scintigraphy NEG, CRP: 0.31, ESR: 39

Apr 2012: Apical Periprosthetic Fracture

Apr 2012: Osteosynthesis with Plate, Screws, Cerclages and Splint on the opposite side



Jan 2013: Failure of the Osteosynthesis



March 2013: Revision with Custom-made Megaprosthesis

Septic Revision

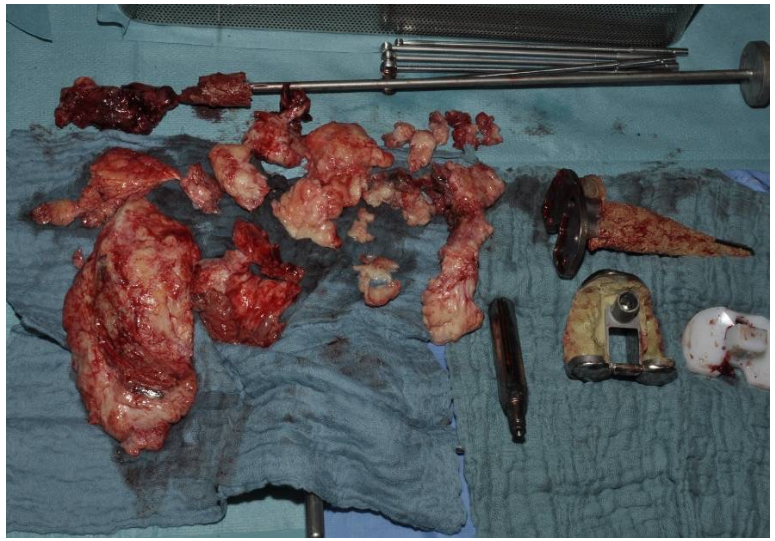
RADIAL DEBRIDMBENT REQUIRES BIG EXPOSURE

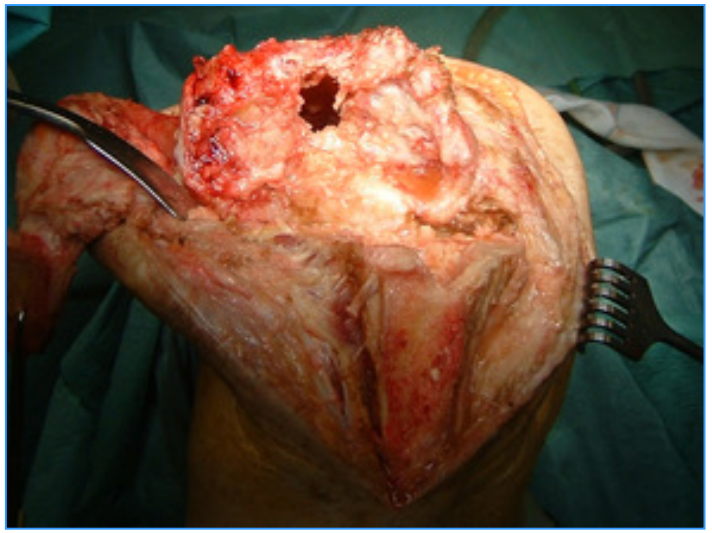
COMPROMISED STABILIZING STRUCTURES

MARKED BONE LOSS

↓

NEED FOR HINGE IMPLANT





COURTESY OF AKOS ZAHAR

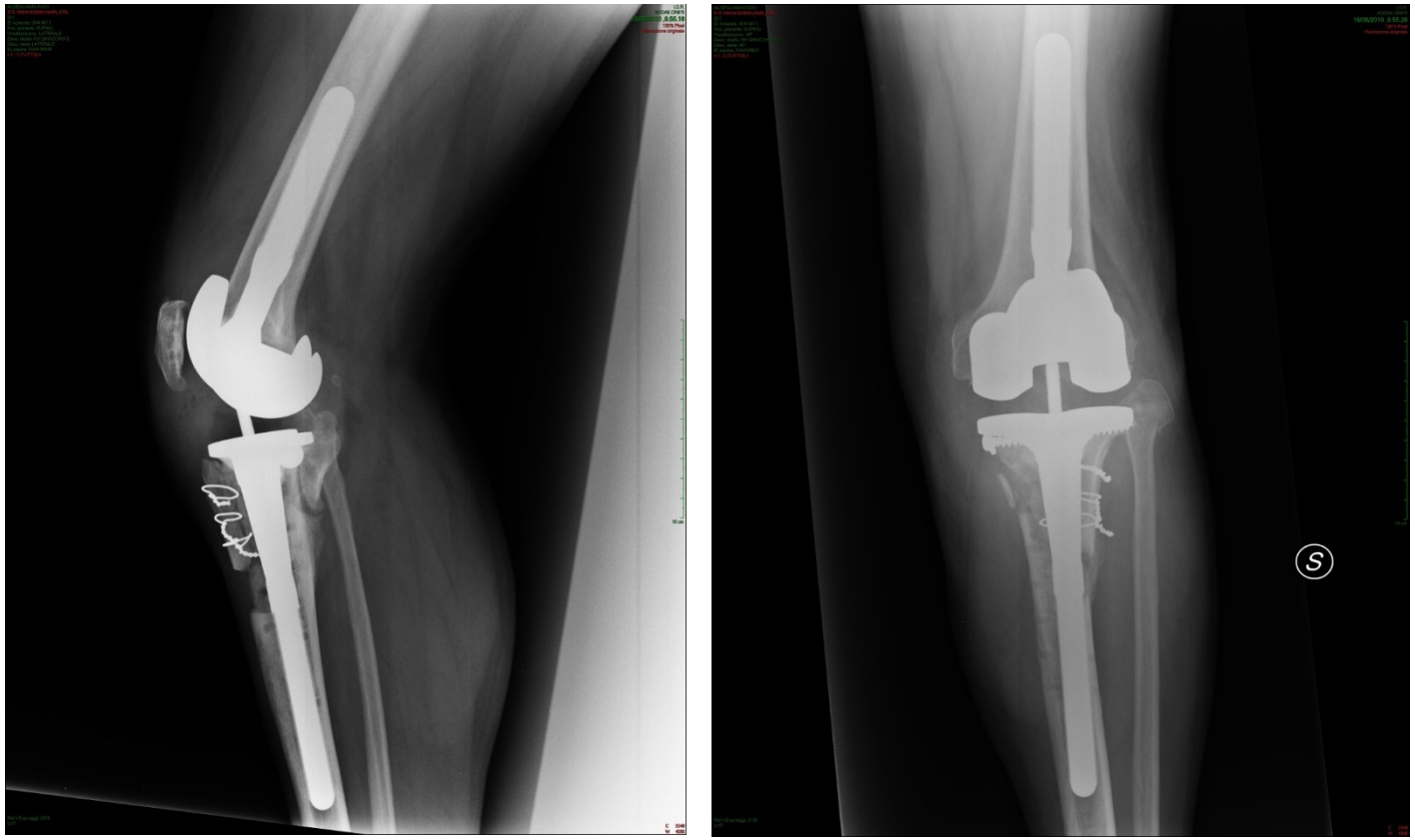
SEPTIC REVISION

2) MALE, 60 YRS

POST-TRAUMATIC OA

SEPTIC REVISION

3 weeks later: fever (38°) pain and wound redness;
PCR: 25.24 mg/100ml; VES: 120 mm/h



I&D / Intraoperative coltures: S.Epidermidis multiresistant

SEPTIC REVISION

2 months later : wound dehiscence at the level of the cerclage
PCR: 2.79 mg/100ml VES: 94 mm/h

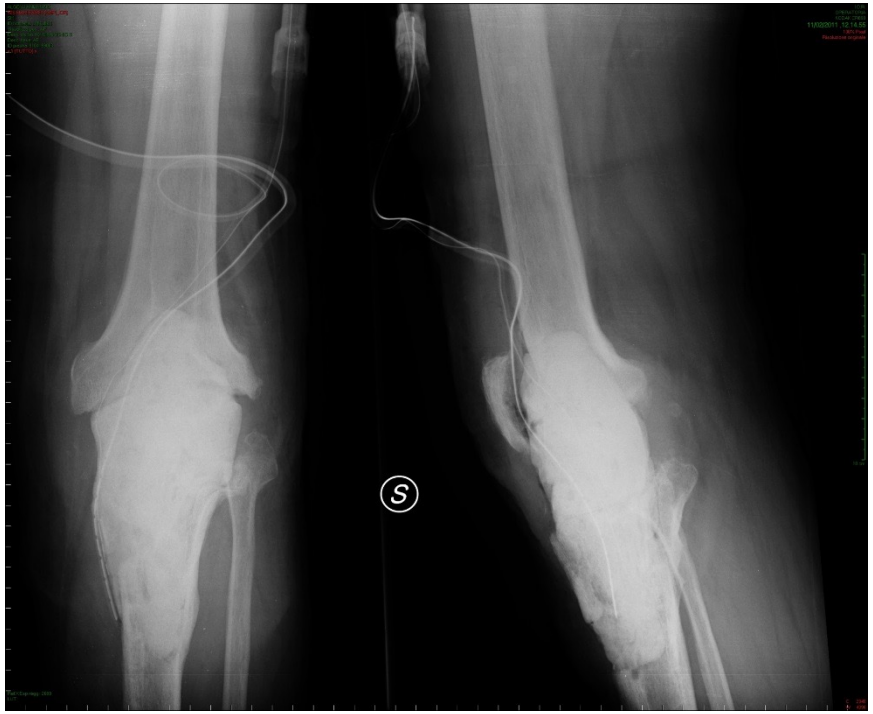
SEPTIC REVISION

2 months later new admission for swelling, fistula; PCR: 7.56 mg/100ml; VES: 120 mm/h; Scintigraphy with labeled granulocytes

Intraoperative coltures: S. Aureus

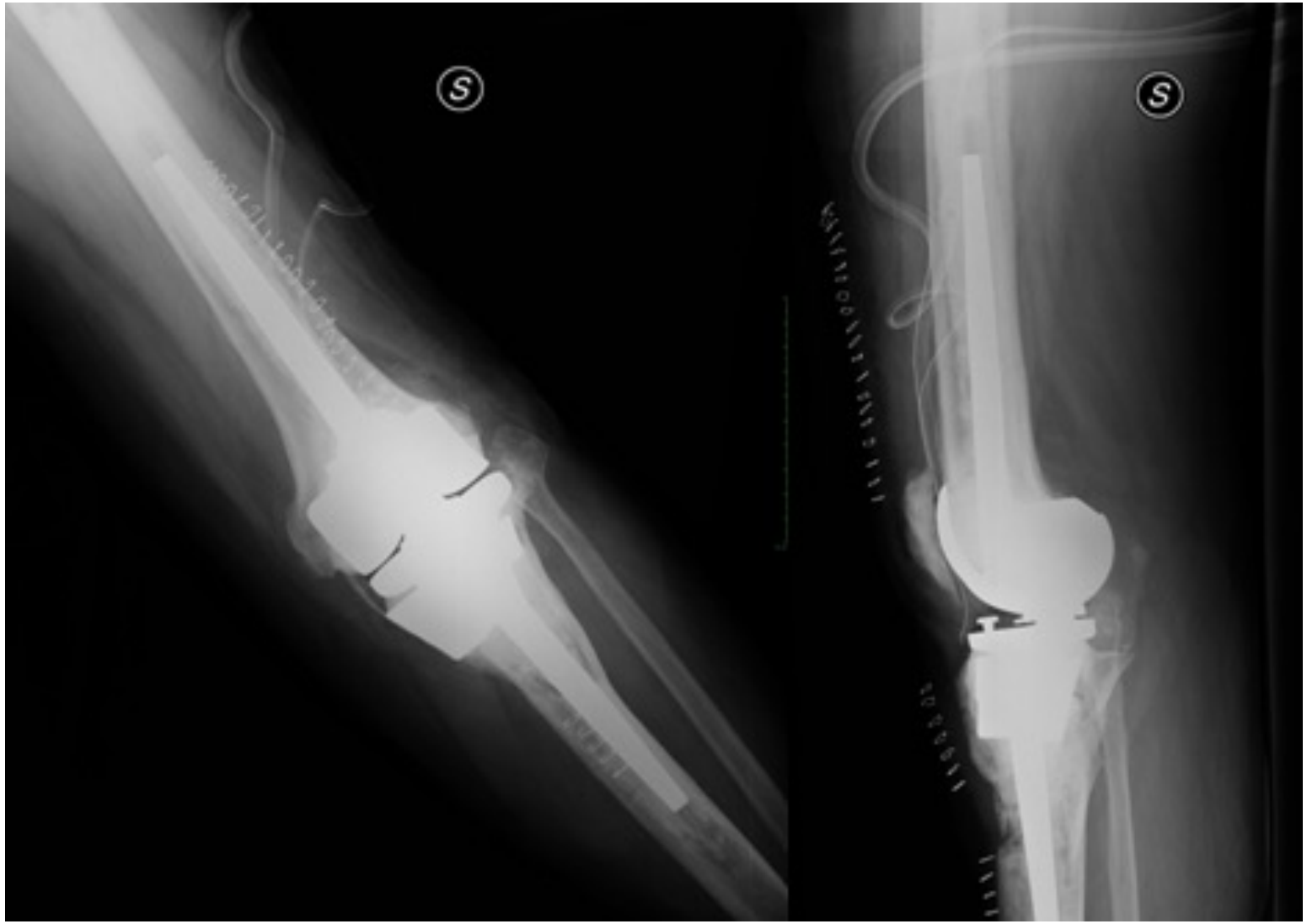
SEPTIC REVISION

Next months : 2 antibiotic cement exchange
Scintigraphy with labeled granulocytes +;



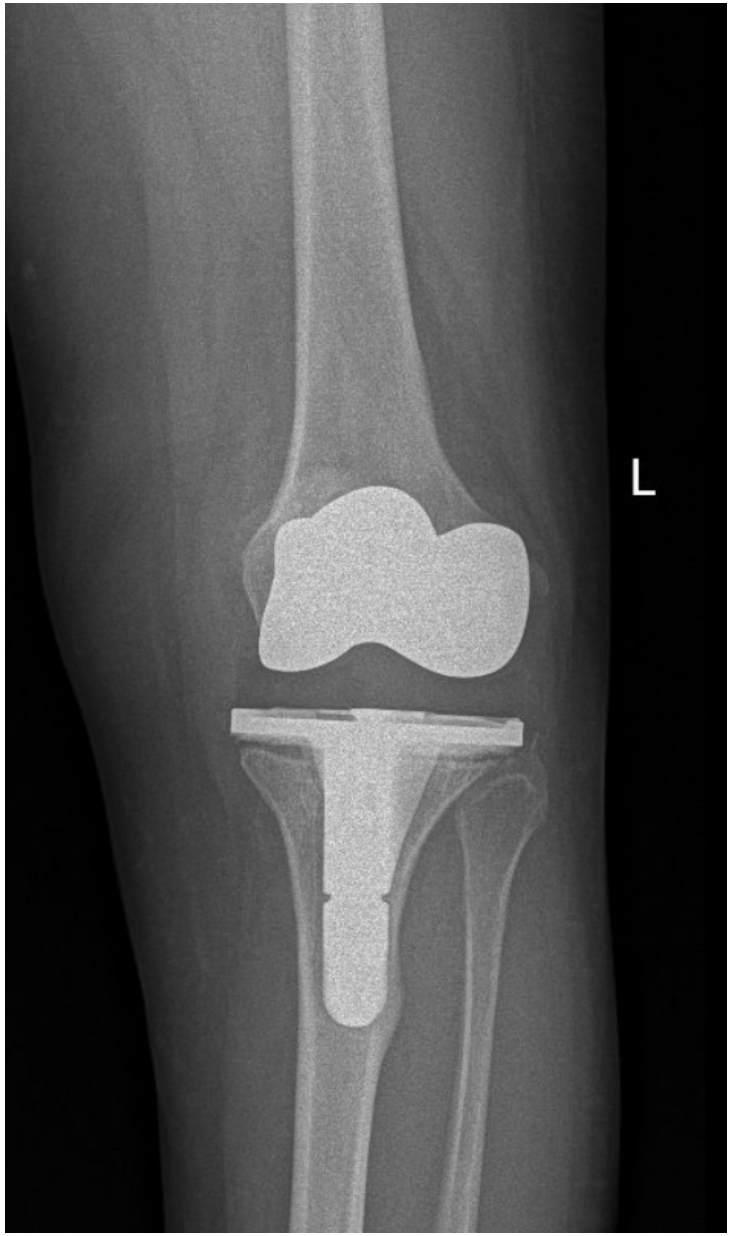
Intraoperative coltures: Negative

SEPTIC REVISION



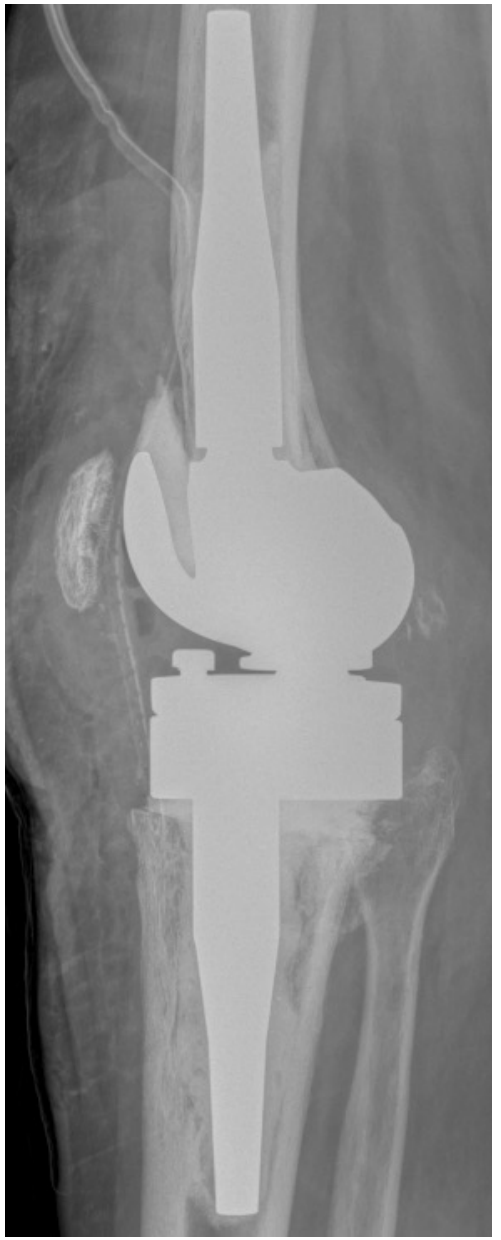
F, 62y

- 2014, PMMG sin
- 2020, implant loosening because of PJI → PTG sin
- 2021 Feb, new consult because of
  - pain +++
  - ROM 0-95°
  - medial instability



2-stage revision
- 2022 June, PTG removal

→ - cultures



June, 2022

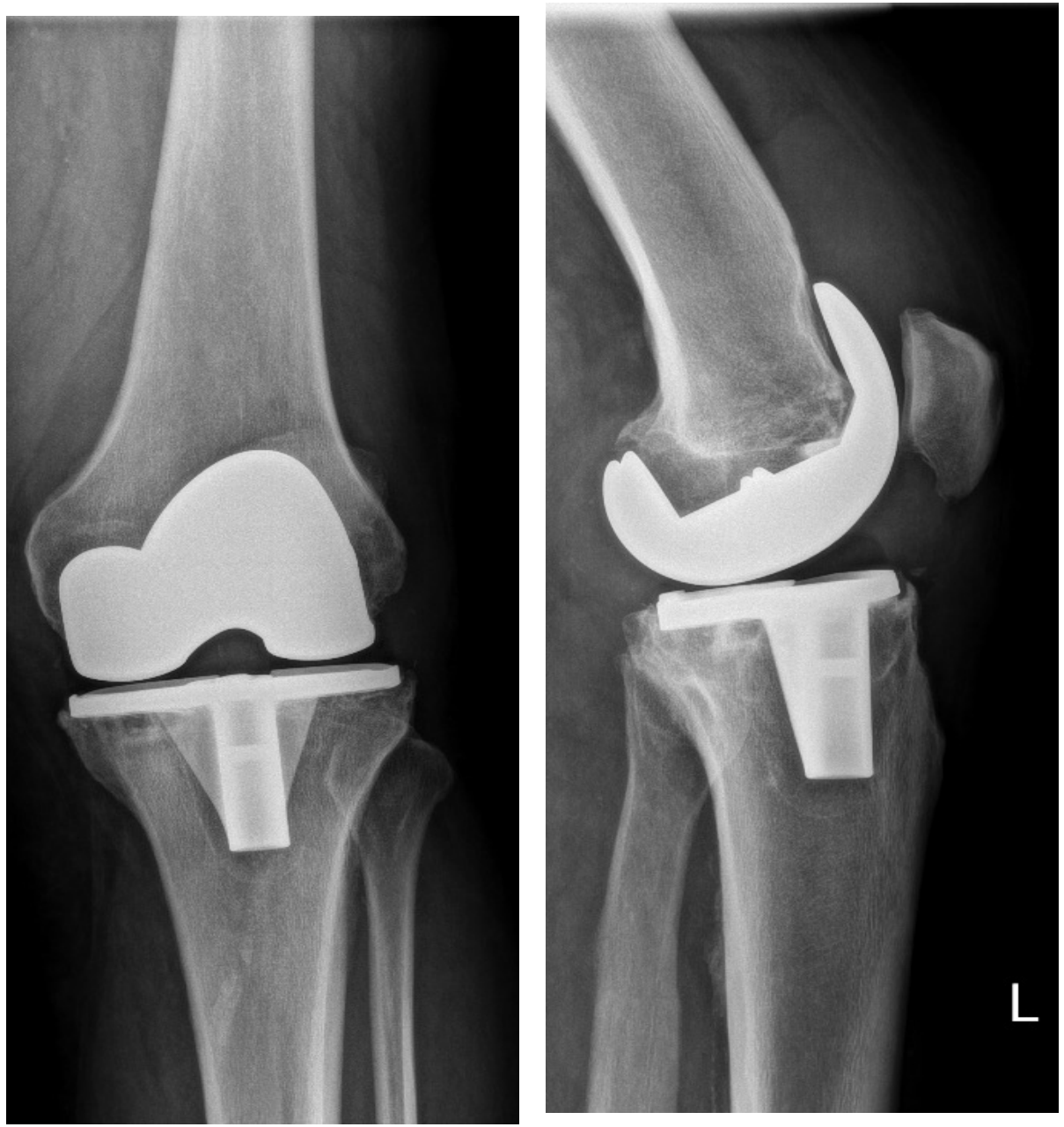
Nov, 2022 Link ENDOMODEL XS

M, 69y

- 2010, PTG sin
- 2018, implant loosening
  - pain +++
  - ROM 0-90

→ 1st arthrocentesis → ++ for S. aureus

→ 2nd arthrocentesis → - cultures



- 2018 April, **1-stage** revision

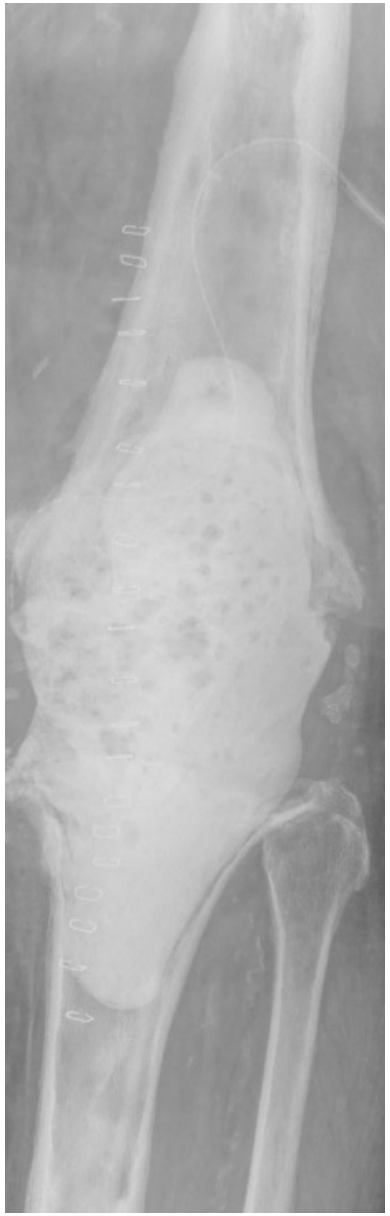
- 2018 April, **1-stage** revision
- 2019 October, ER because of <u>left knee swelling + fever</u>
- 2019 Oct, PTG removal

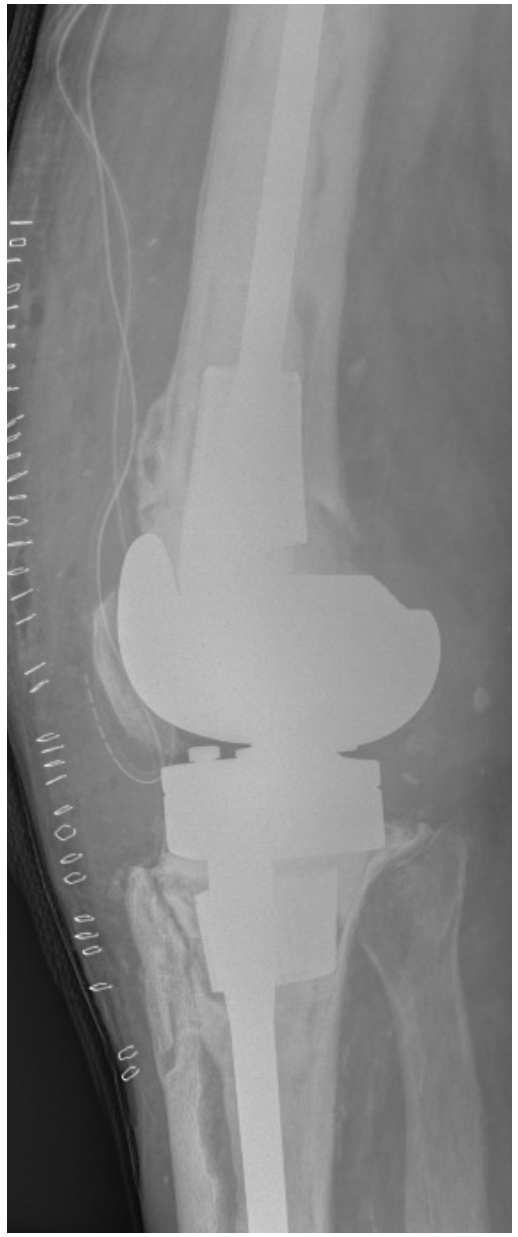
→ cultures → + S. aureus

- 2020 Feb, revision surgery

Link ENDOMODEL

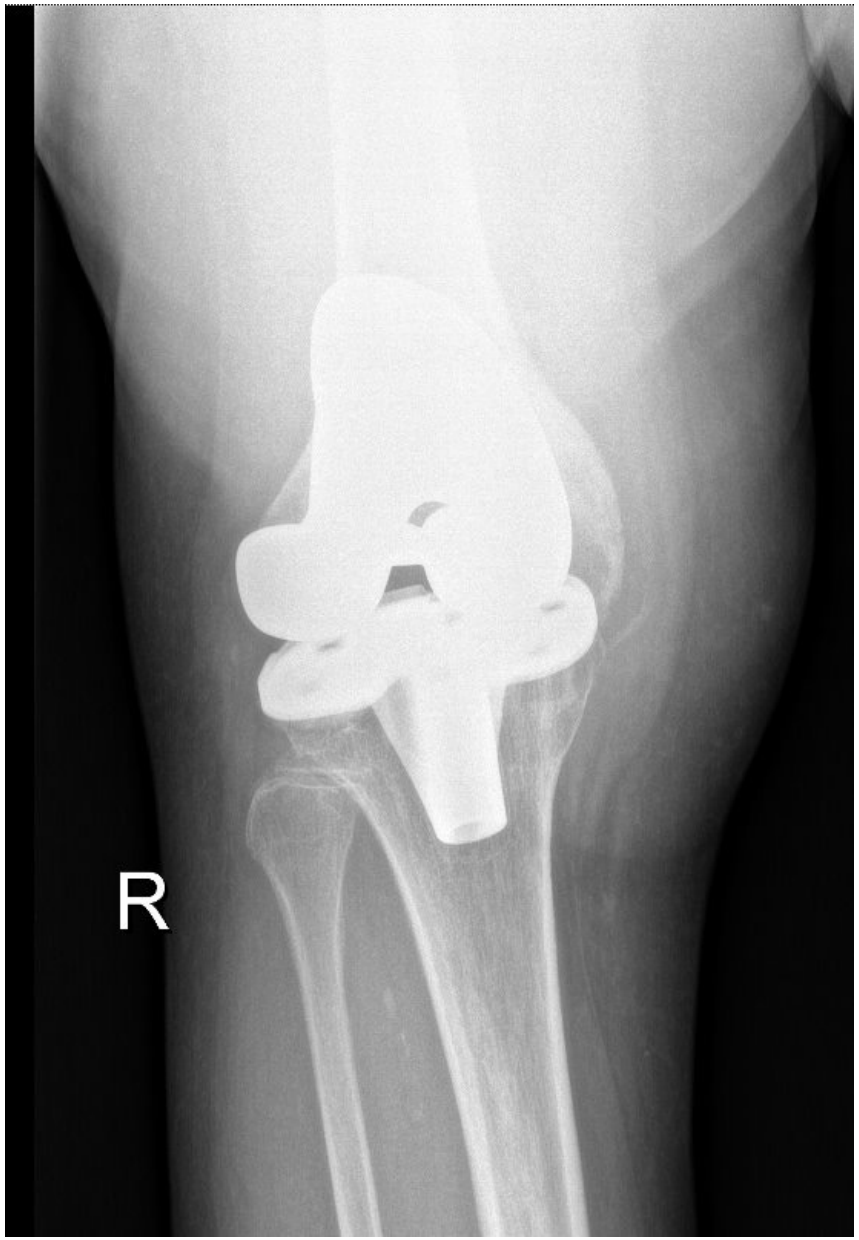
- 2020 Feb, revision surgery
- 2023 April, new onset of pain → + scintigraphy → implant loosening
- 2023 Nov, 2-stage revision → cultures → + S. epidermidis
- 2024 Jan, revision surgery





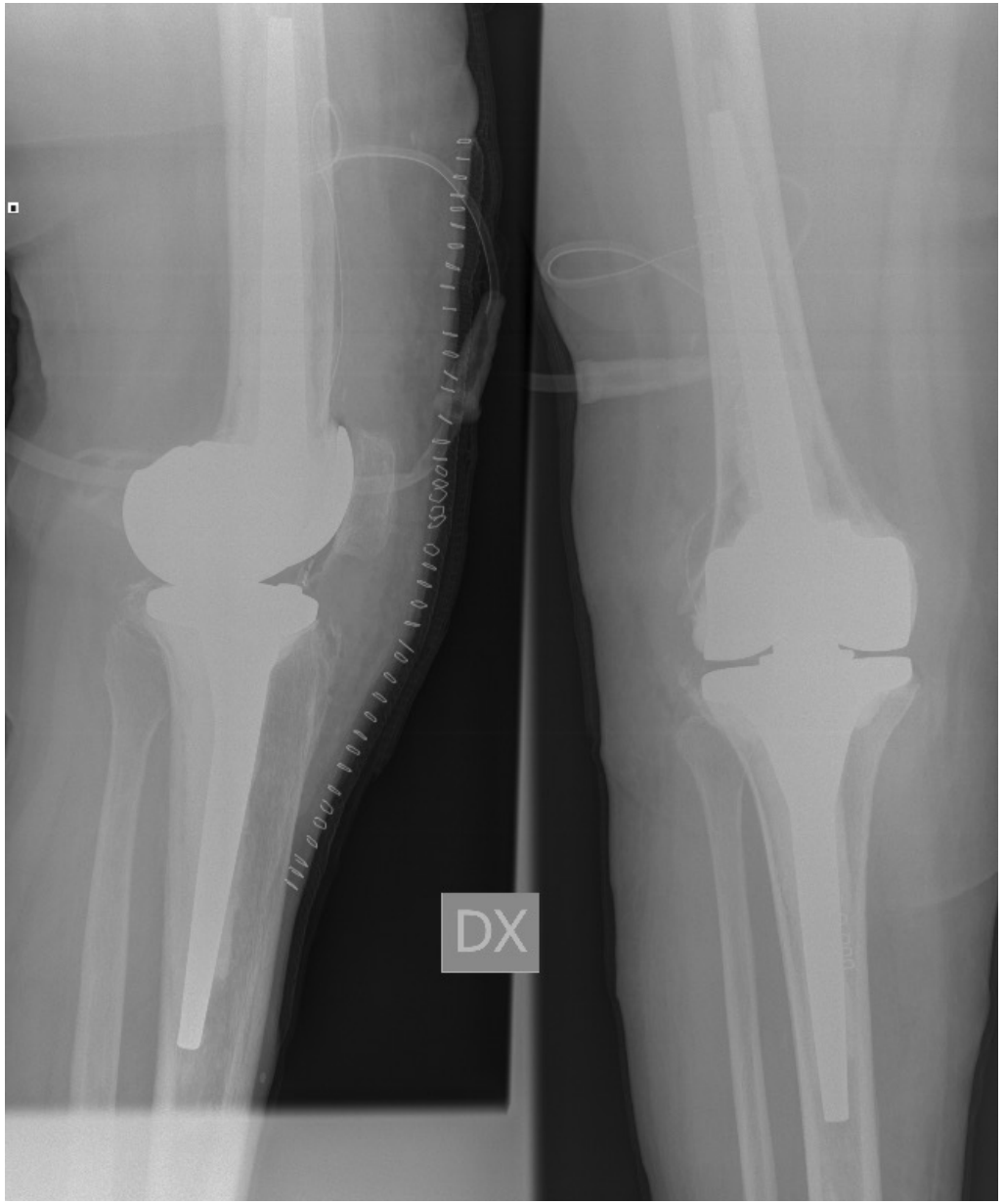
F, 69y

- 2015, PTG **<u>dx</u>**



F, 69y

- 2015, PTG **dx**
- 2018 September, implant loosening
  - pain ++
  - ROM 0-85
  - medial and lateral instability
- 2018 October, **2-stage** revision → -cultures
- 2019 Jan, revision surgery



- Jan 2021, PTG **<u>sin</u>**

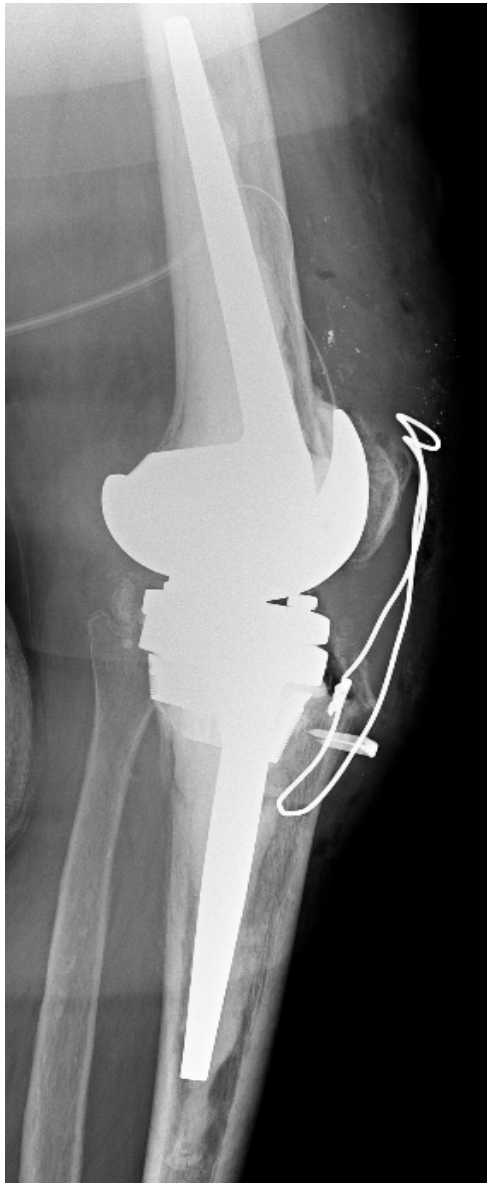
Jan, 2021

- 2021 Jan, PTG **sin**, S&N Legion PS
- 2023 June, periprosthetic fracture

→ implant removal bc of extensive synovitis

Jan, 2021

June, 2023

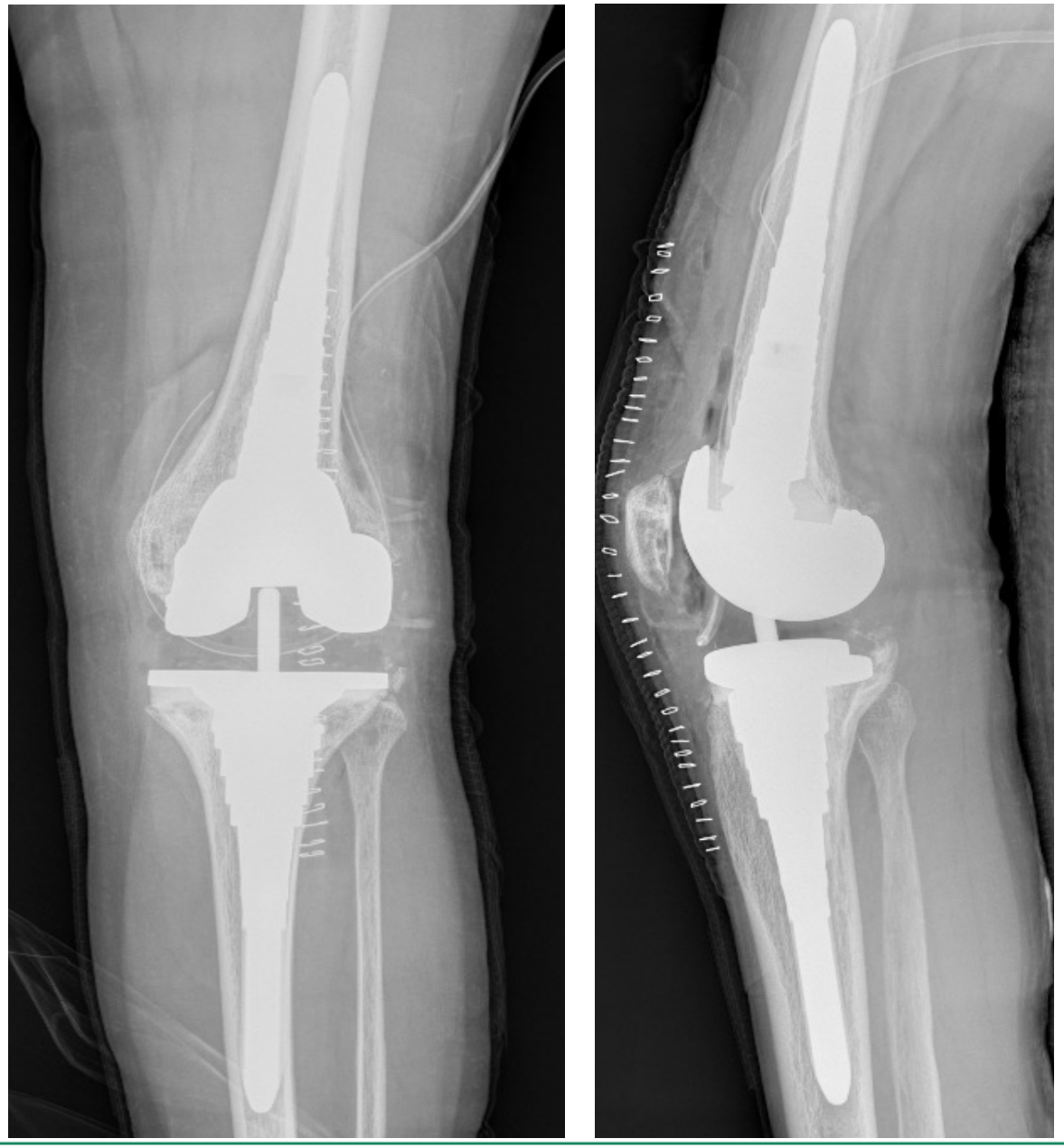


F, 70y

- 2010, PTG sin
- 2022, implant loosening

→ + scintigraphy and TC

→ arthrocentesis → - cultures



M, 66y

- 2022, PTG dx

M, 66y

- 2022, PTG dx (Rejoint)
- 2023 Feb, implant loosening

- pain +++
- PET +

Hw, - cultures → dapto + piptazo → levofloxa + minocycline

- March 2023, Link ENDOMODEL 2023

March, 2023 ENDOMODEL LINK MONOBLOCCO

M, 34y

History: right knee fracture following a gunshot wound with loss of osteo-articular substance

- Pain +++
- ROM 0-30


DX

F, 26Y

Hx: dysplasia epiphysealis

- 2019, left and right knee instability

F, 26y

Hx: dysplasia epiphysealis

- 2019, left and right knee instability
- 2020, bilateral TKA custom made (Rejoint) - SIN

F,

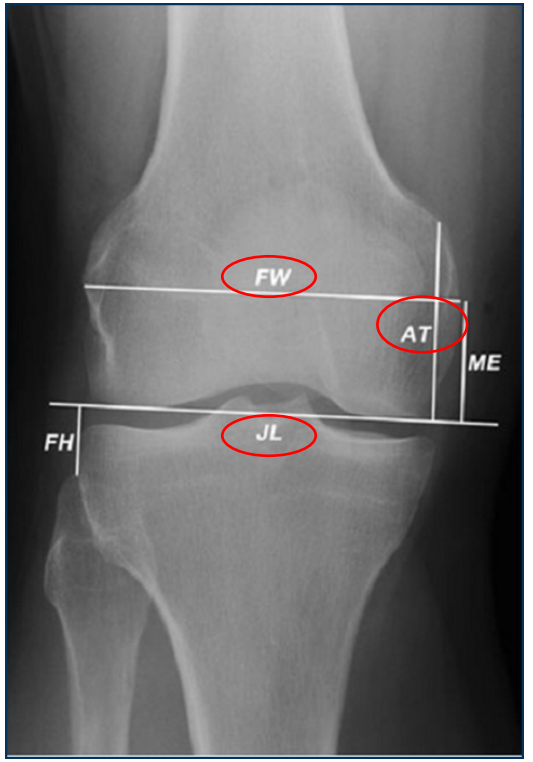
Hx: dysplasia epiphysealis

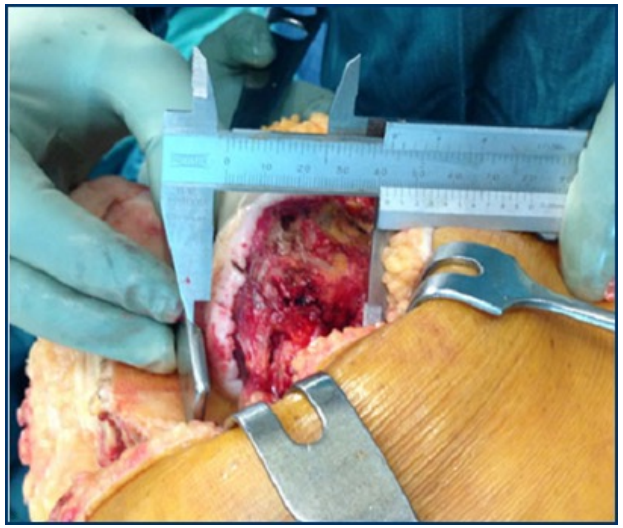
- 2019, lefnd right knee instability
- 2020, bilateral TKA custom made (Rejoint) - DX

> Knee Surg Sports Traumatol Arthrosc. 2016 Oct;24(10):3212-3217.
doi: 10.1007/s00167-015-3556-1. Epub 2015 Mar 12.

The adductor tubercle: an important landmark to determine the joint line level in revision total knee arthroplasty

Francesco Iacono [1], Giovanni Francesco Raspugli [2], Giuseppe Filardo [2], Danilo Bruni [2], Stefano Zaffagnini [2], Simone Bignozzi [2], Mirco Lo Presti [2], Ibrahim Akkawi [2], Maria Pia Neri [2], Maurilio Marcacci [2 3]

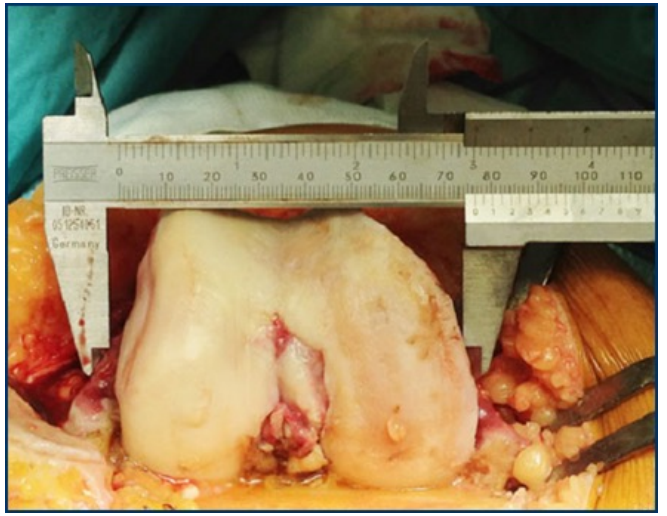




ATJL / FW = 0,53

ATJL = FW x 0,53

AT= adductor tubercle
JL= joint line
FW= femoral width



Grazie
alla salute!