Periprosthetic fractures

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November 2018, OAOS

How joints fail

- Instability
- Infection
- Loosening
- Osteolysis
- Metallosis
- Fracture

Incidence

Peitgen et al JOA 2018

- Periprosthetic femur fracture
- Uncemented, tapered, titanium stems
- 1.6% at 10 years
- 13.2% at 29 years
- THE major mode of failure in long term for cementless THA

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Causes

- Falls!
- Implant design
- Rethink Cement?
- Surgical approaches
- Osteolysis
- Osteoporosis

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Classification

Periprosthetic hip fractures

- Vancouver
  - A: Pertrochanteric
  - B1: Fixed stem
  - B2: Loose stem
  - B3: Poor bone
  - C: Distal to implant

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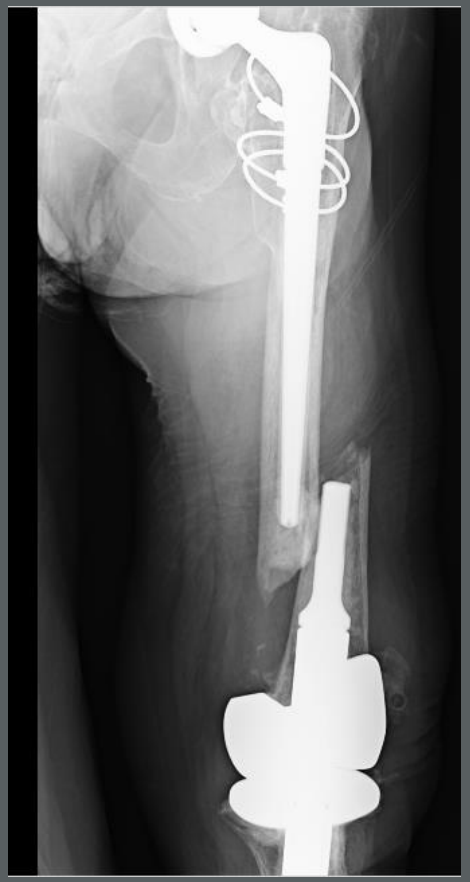
X-TABLE
L


Sup

Interprosthetic fractures



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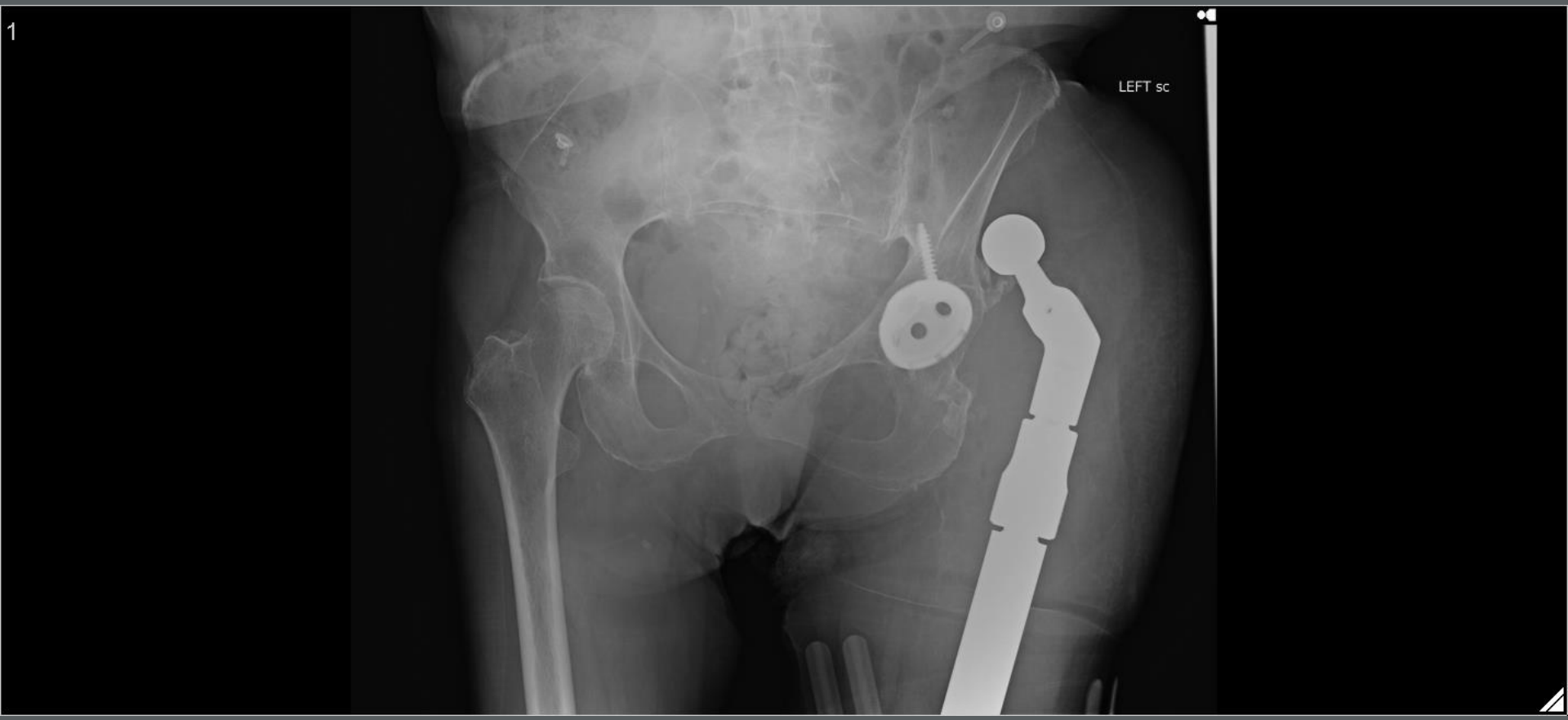

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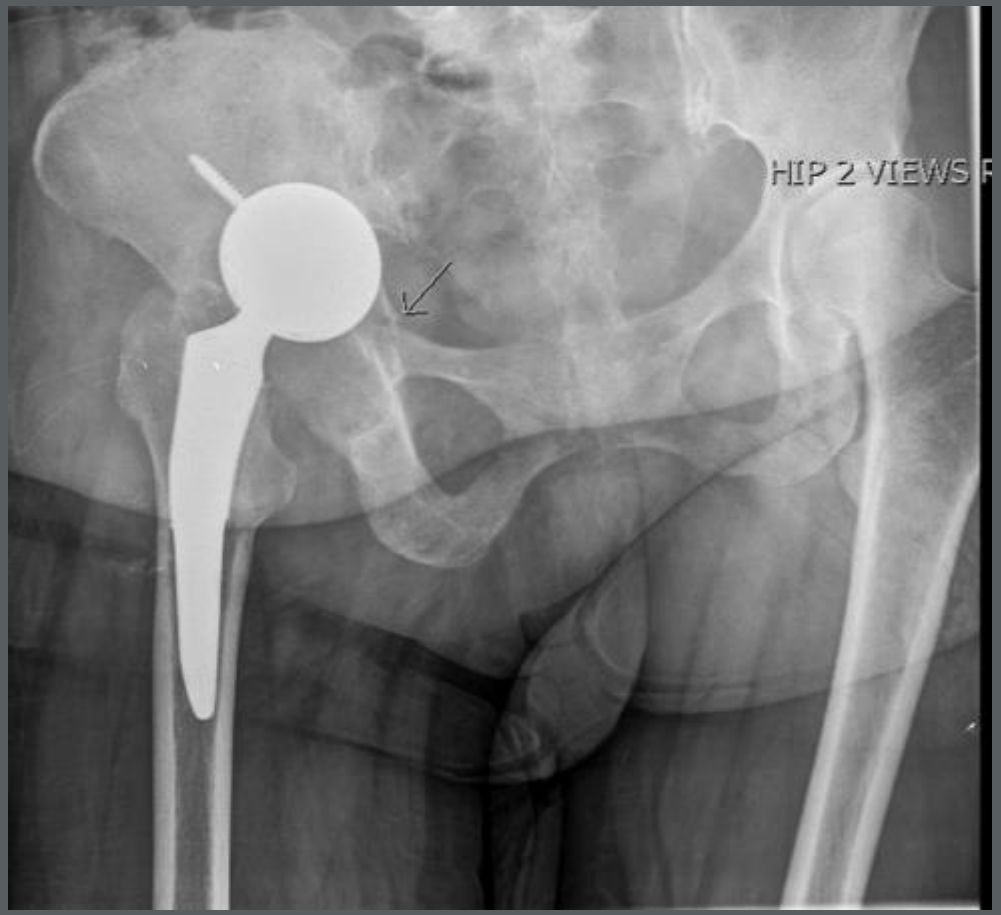
Not just the femur



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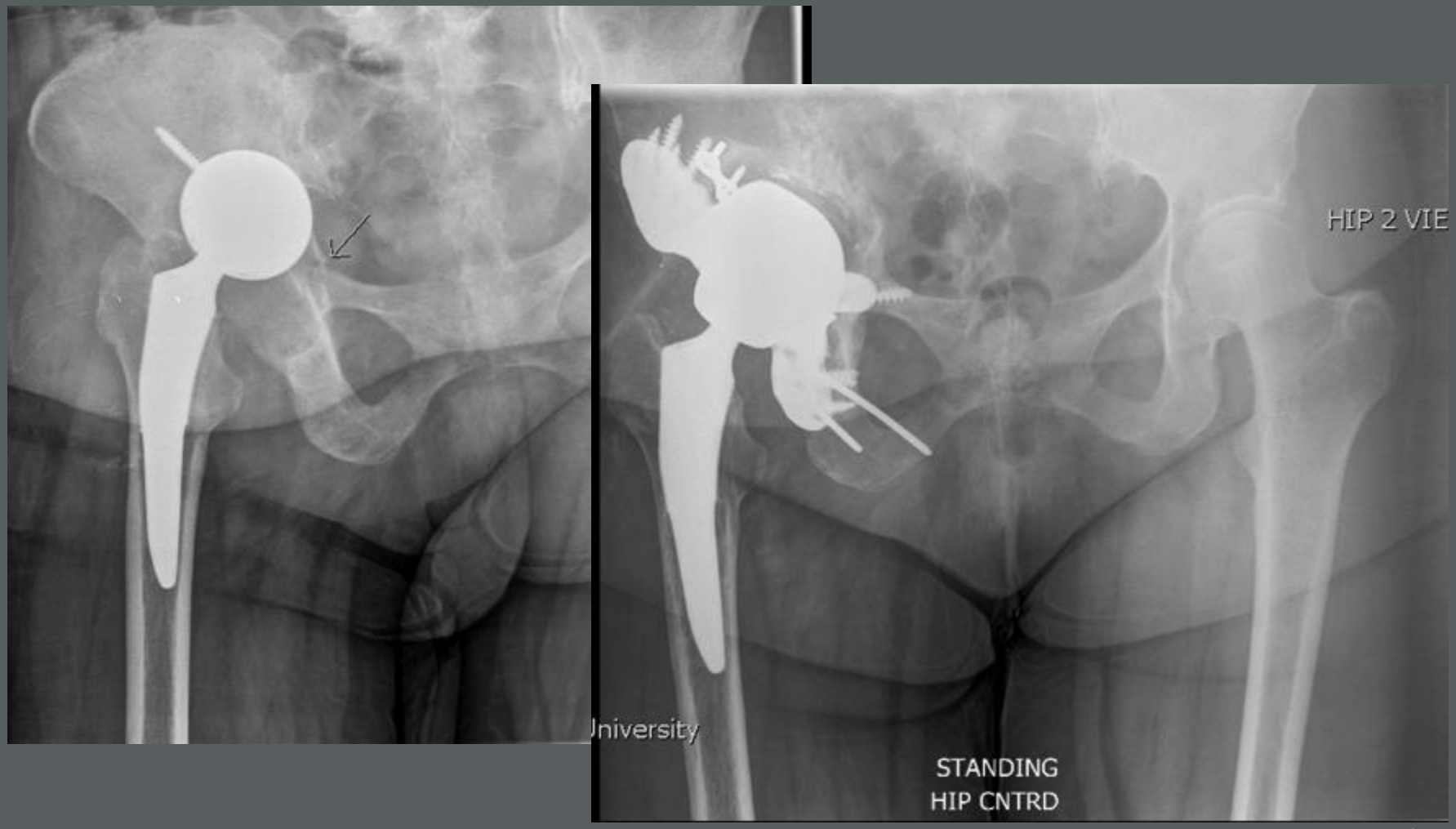

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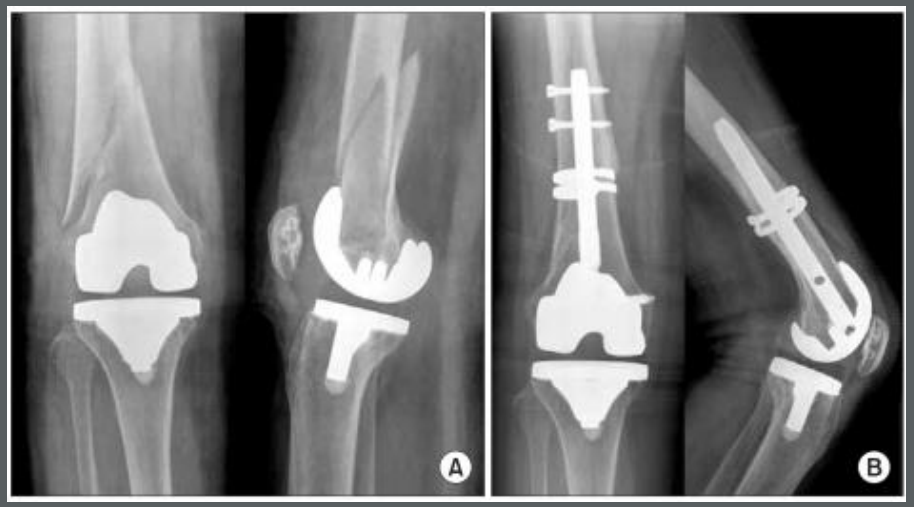
Not just hips



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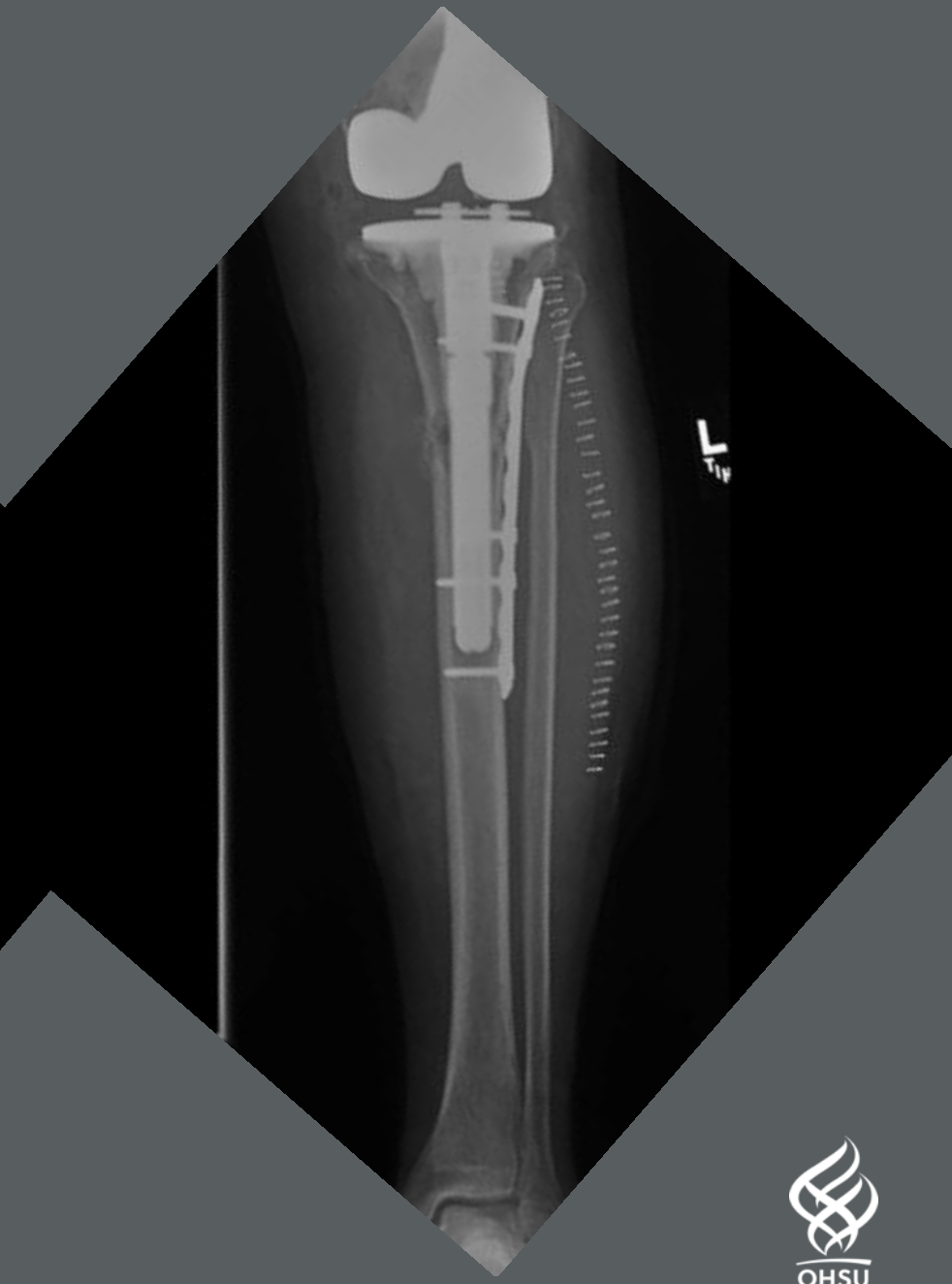
Not just trauma
Left ‘knee’ pain, May

August



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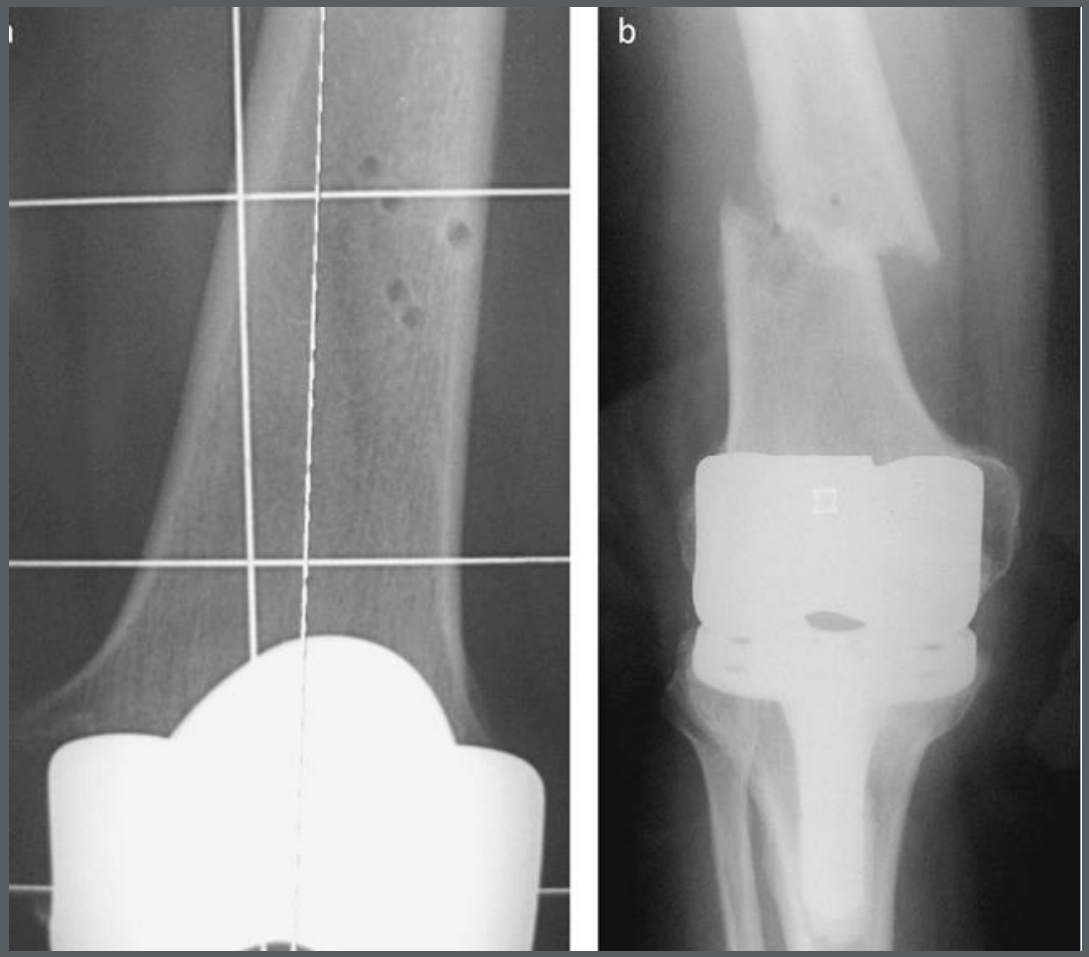
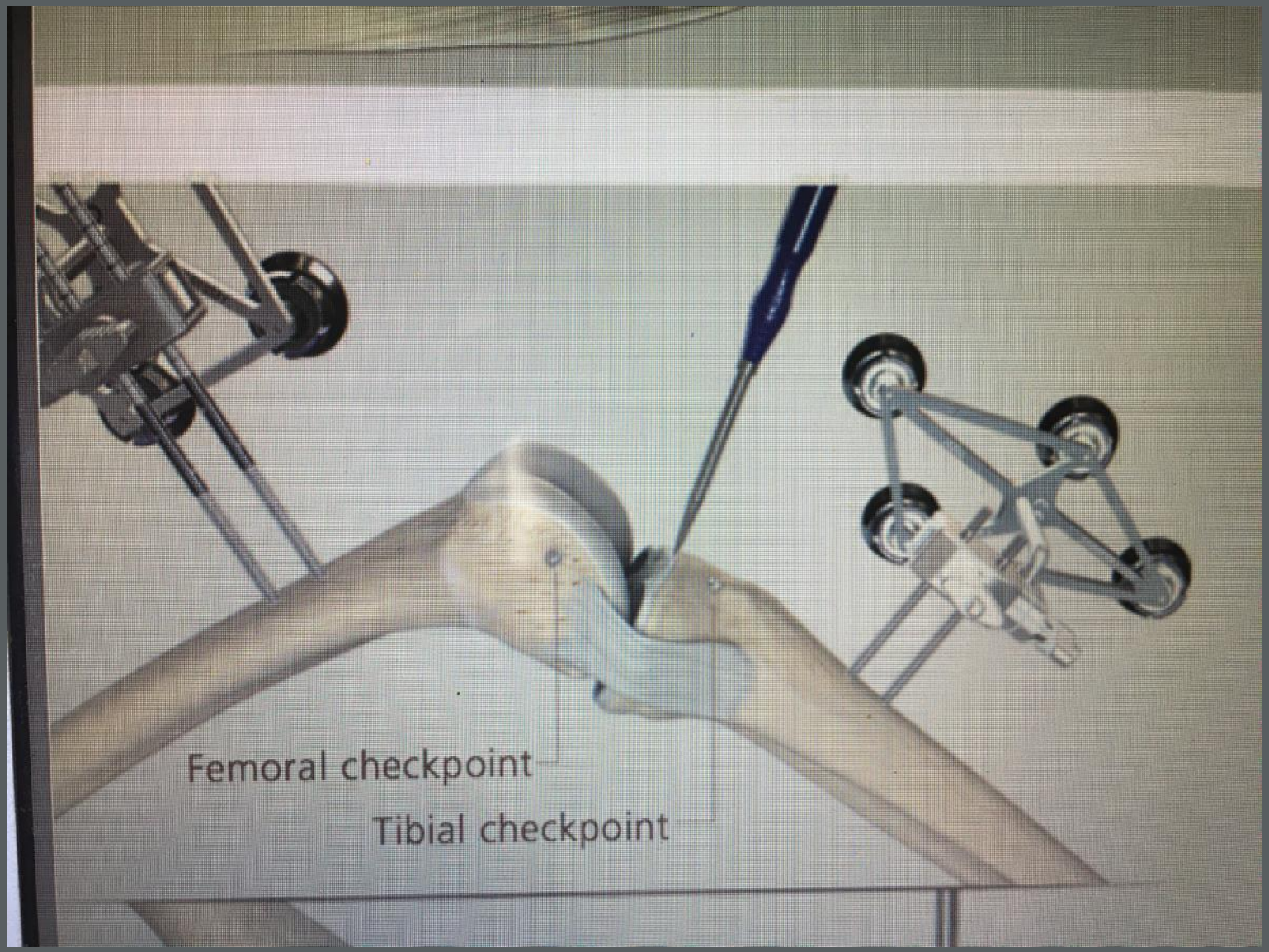
December

They're back!




Femoral checkpoint
Tibial checkpoint

Periprosthetic fracture Summary

- Technically challenging
- Procedures range in complexity
  - Cables only to total femur replace
- Surgical goals
  - Stabilize fracture
  - Restore alignment
  - Promote early weight bearing
  - Poly exchange?
- Extensive contingency planning
- Implant identification

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Periprosthetic Fracture Summary

- Urgent
- General anesthesia
- Not minimally invasive
- Recovery
  - Not like a primary joint
    - Age
    - Mode of failure
    - Extensiveness of procedure
  - Patients older, more frail, medically complicated

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Thank you!

Thank you!

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Thank you

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