

Case Presentation On Periprosthetic Fracture



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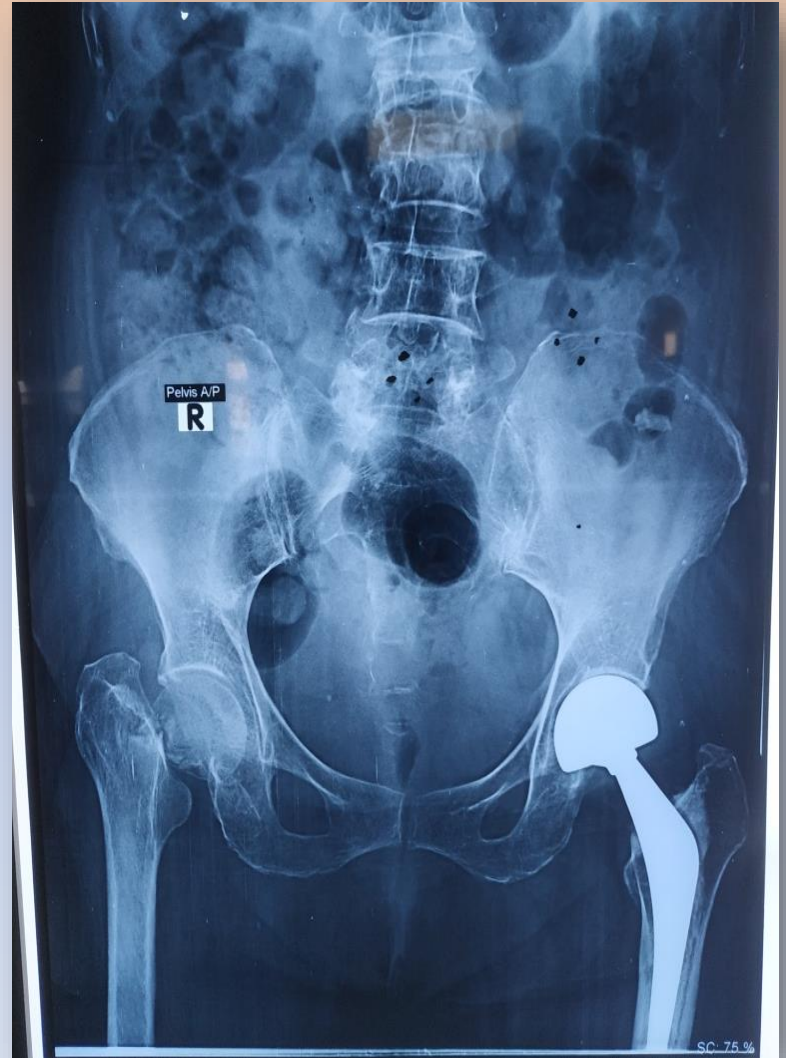
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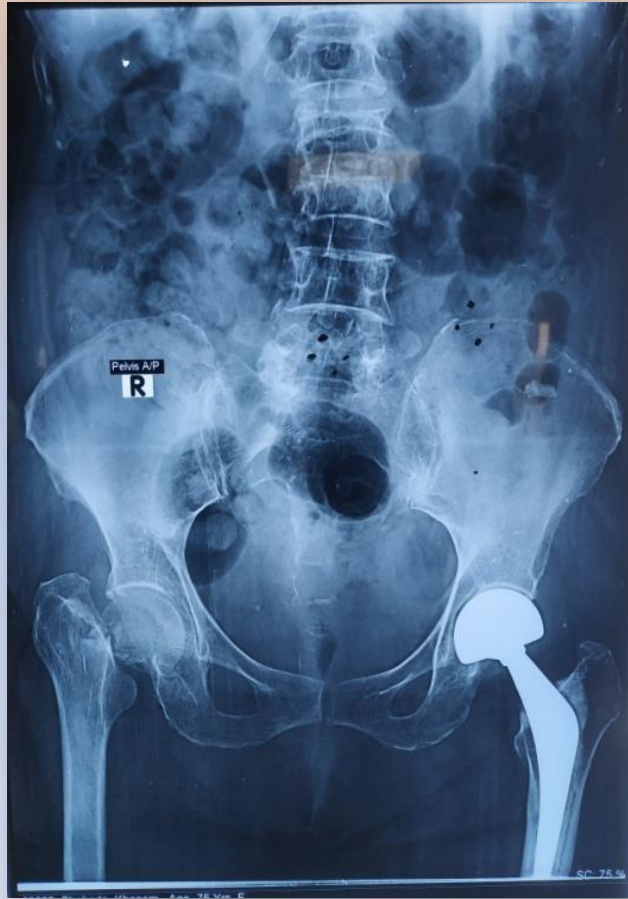
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- A 75-year-old woman with a previous Lt hemiarthroplasty (modular) presented with severe pain on rt hip after a h/o fall on slippery ground & underwent a rt THR.



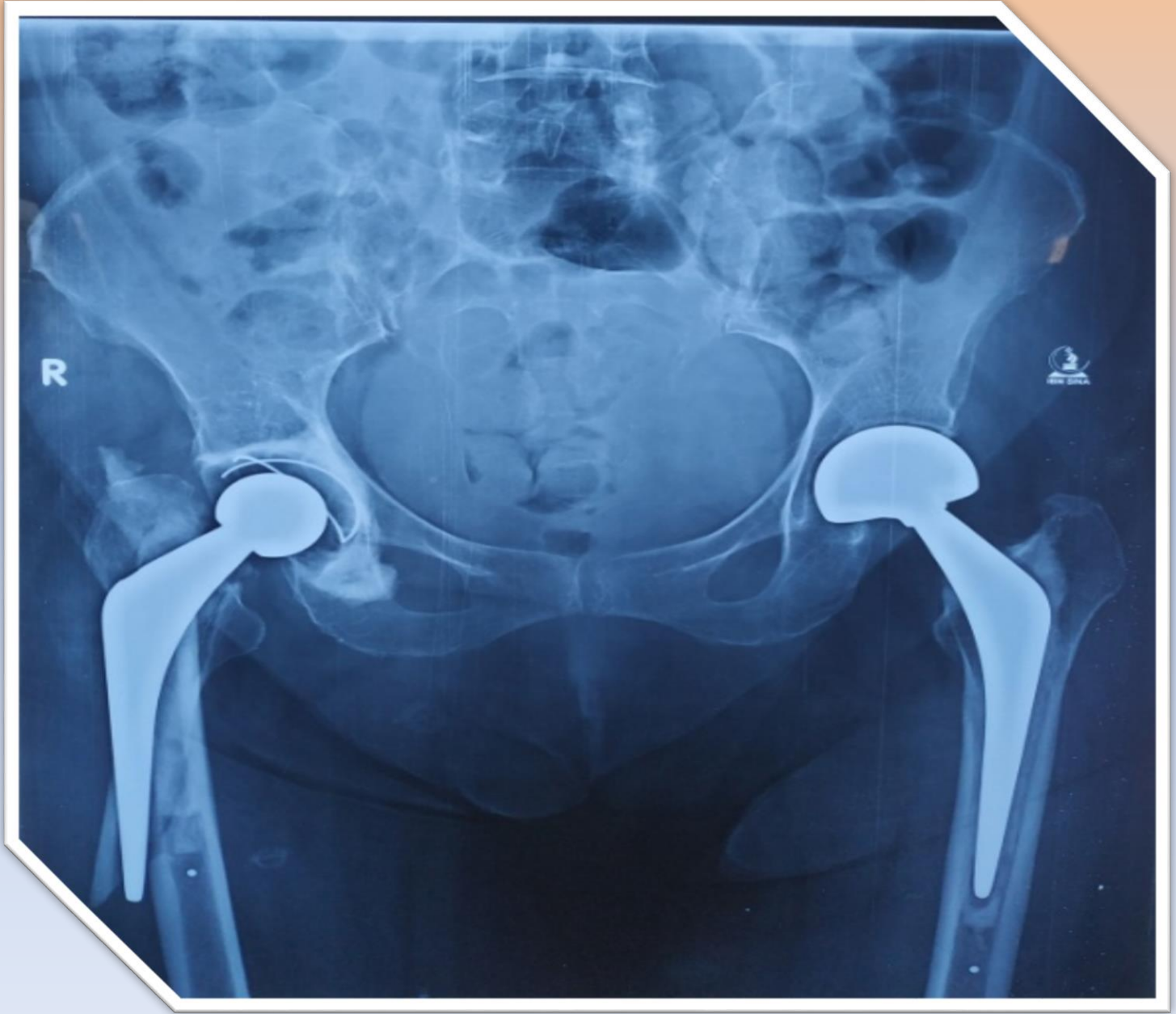


- Pt was doing well and walking pain-free, when at 27days post-op, she tripped & fall again & landed directly onto her rt side.
- Did not lose consciousness and only complained of rt hip and groin pain and was not able to ambulate after the fall.

- Taken to emergency for evaluation.
- Her past history is noncontributory, and surgical history is as previously noted.
- P/E include pain with axial loading and restricted int/ext rotation of rt hip.

- Skin intact, and good sensation to light touch and motor function of L4-S1 distribution.
- Do not have any tenderness to palpation around the knee or distally.
- She has 2+ dorsalis pedis and post-tibial pulses.
- An (AP) X-ray of rt hip is obtained.

- What is the most likely diagnosis?
- What other aspects must be considered before treatment ?
- What is the most appropriate treatment for this patient?

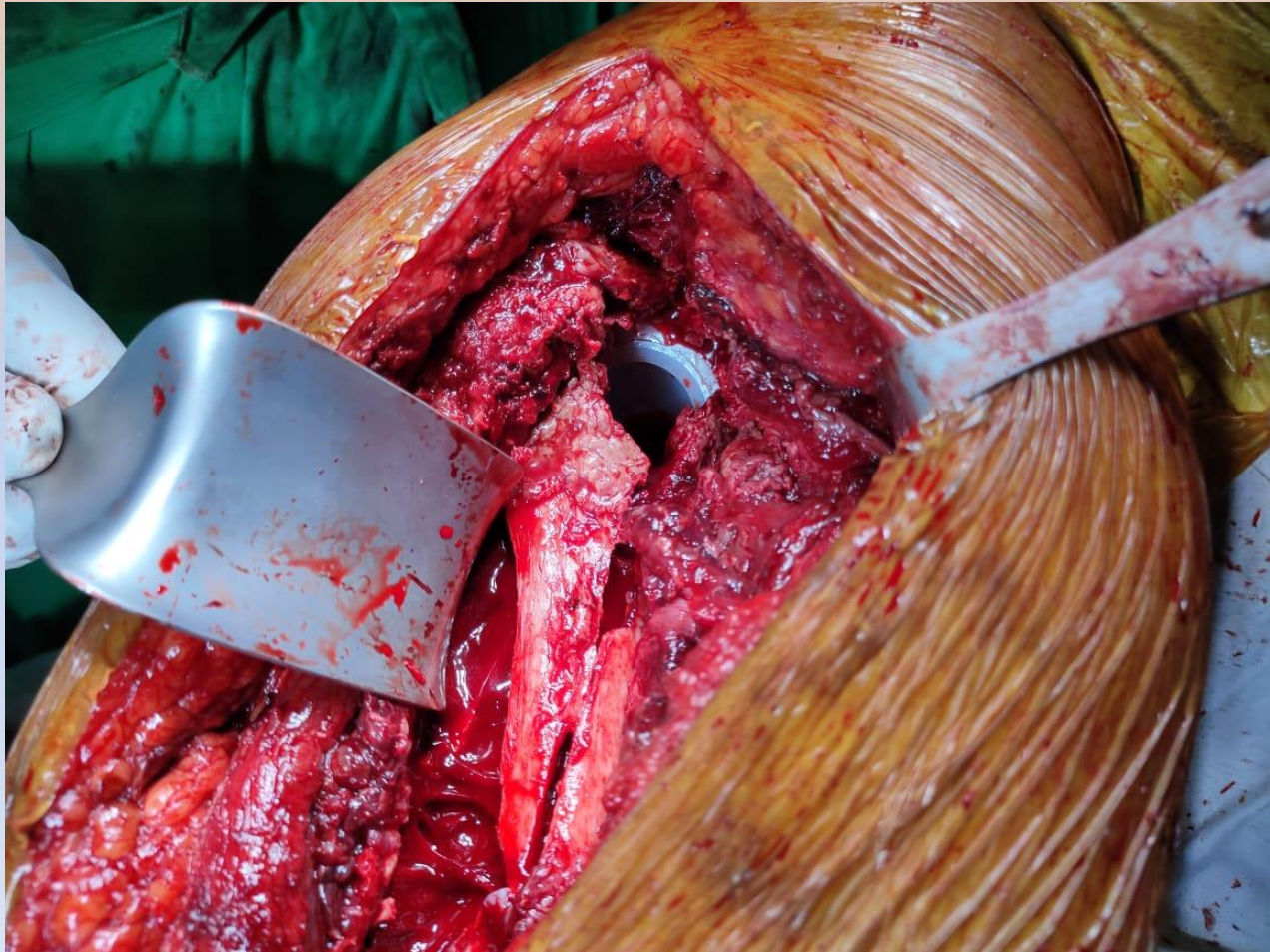


- **Most likely diagnosis:** Right periprosthetic femur fracture.
- **Additional considerations:**
 1. Stability of the prosthetic femoral system
 2. Quality of the remaining bone stock.

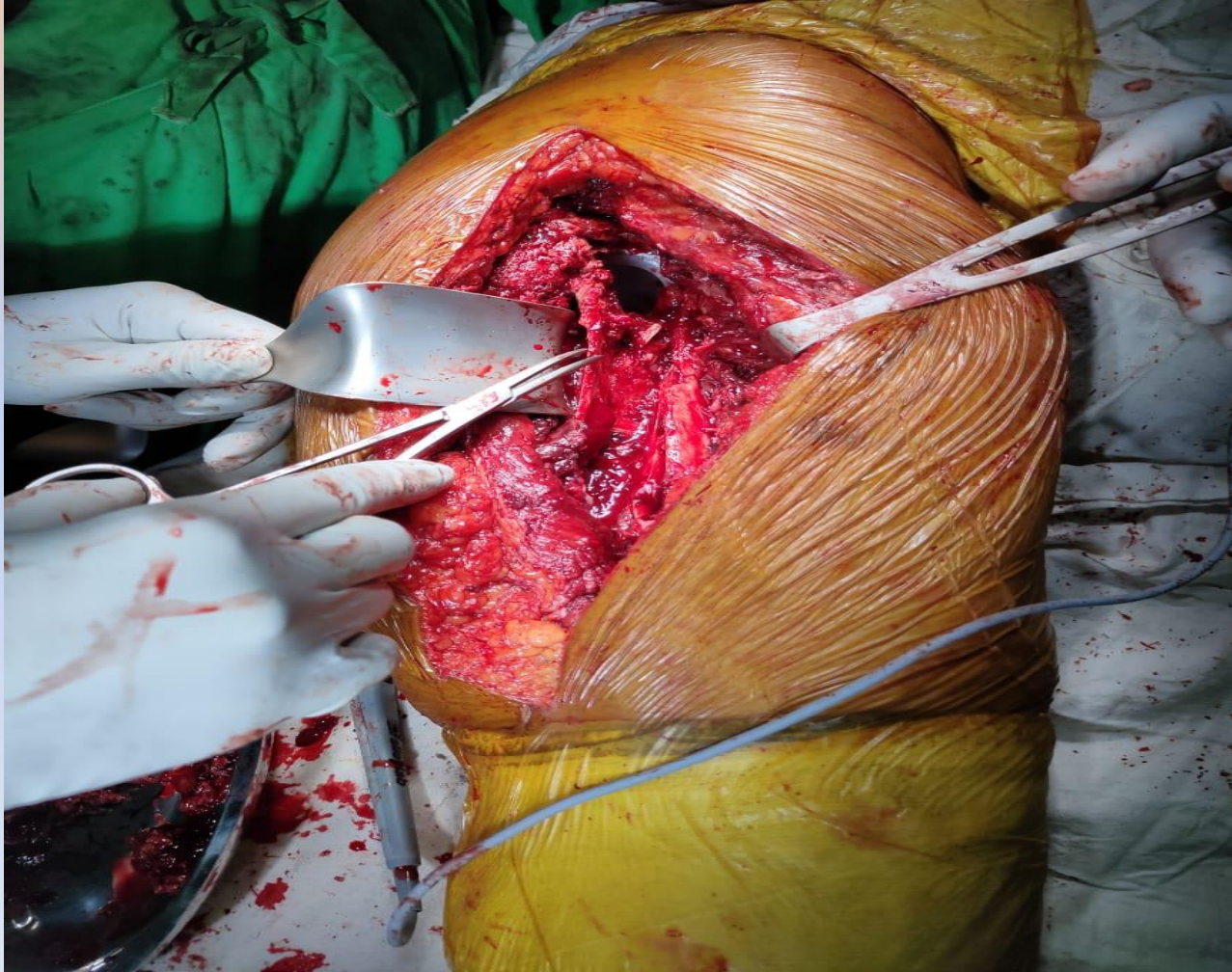
Best treatment

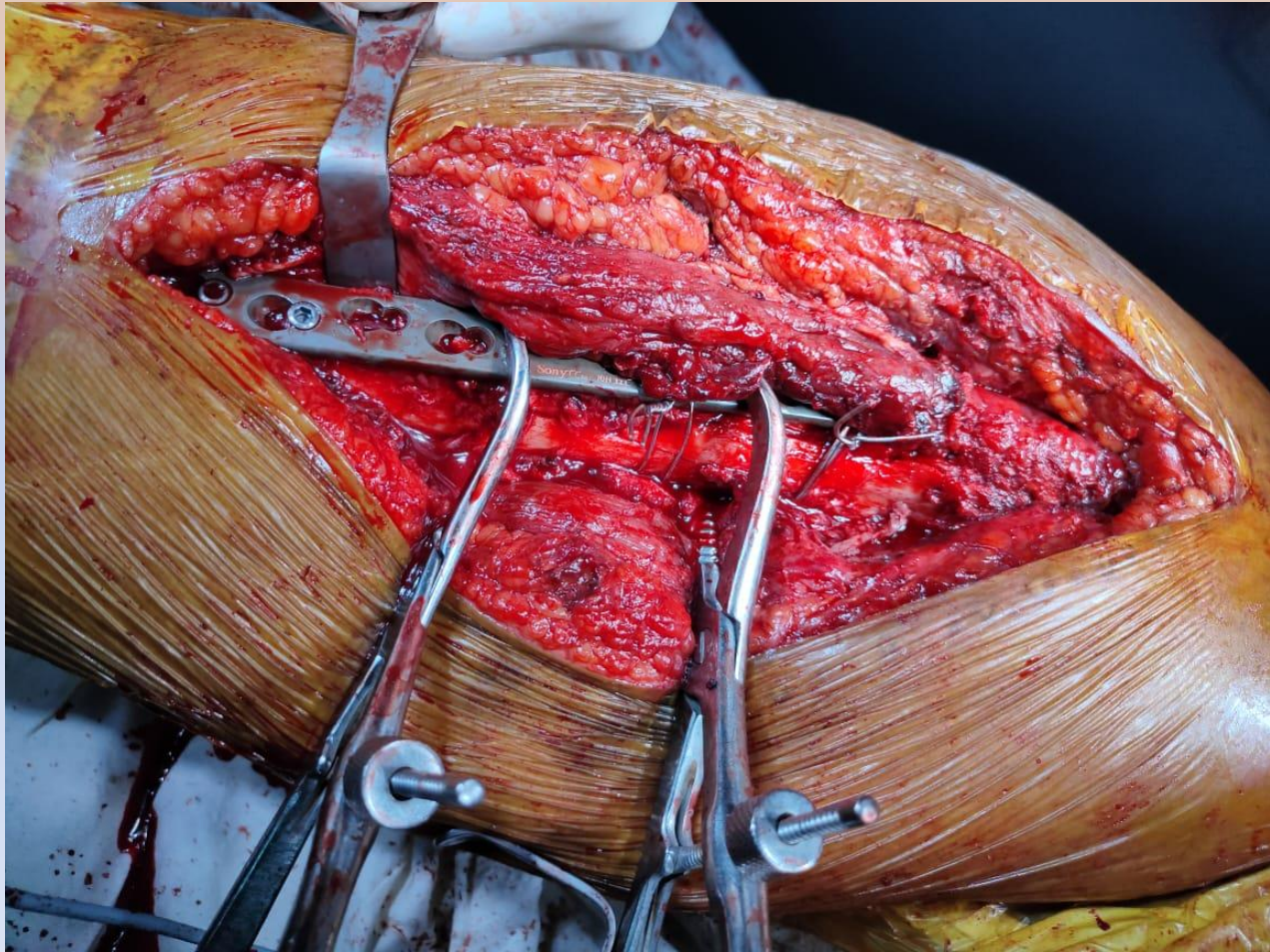
- Revision of the femoral component to a cementless, porous coated long stem that bypasses the fracture by at least 2 cortical diameters.
- Fracture fixation is also required with cables, a plate, and/or strut graft.

What we did

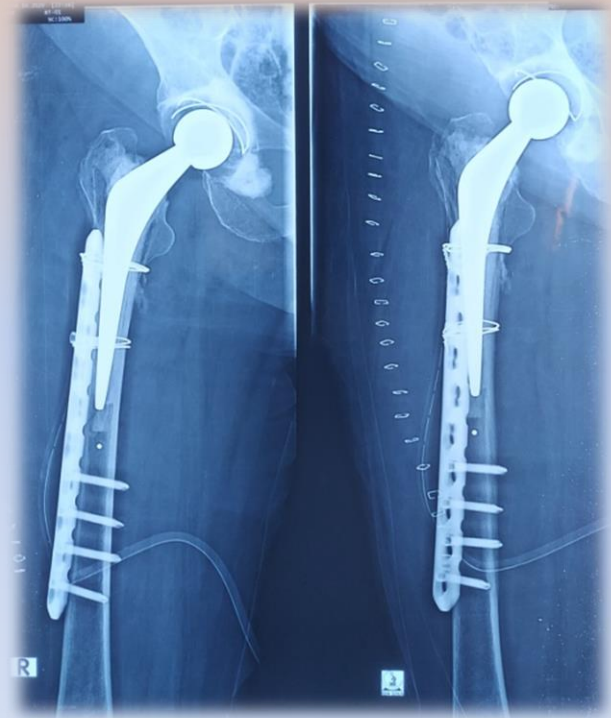
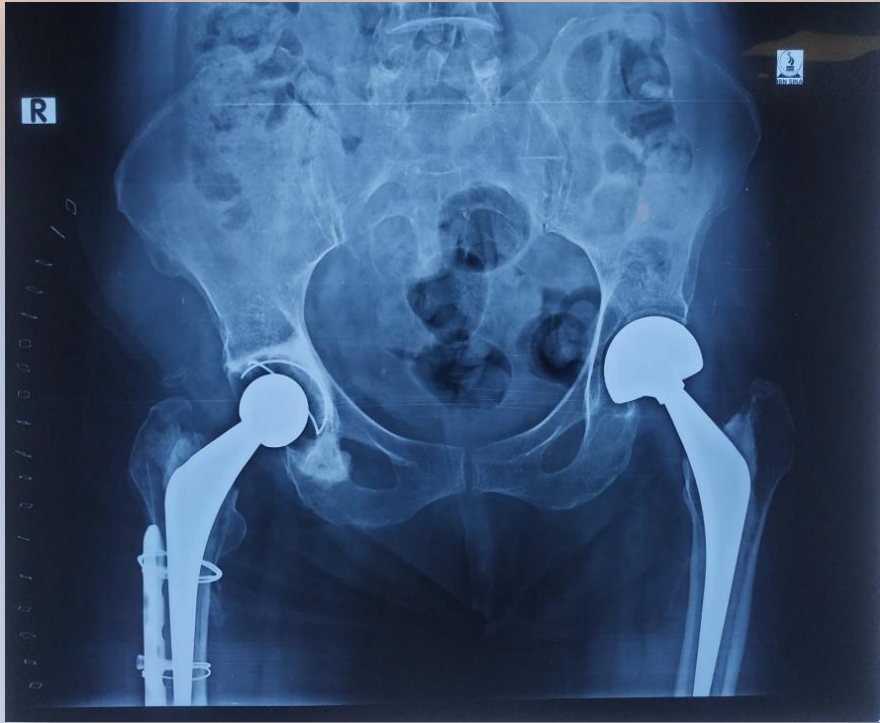












Periprosthetic Femur Fracture

Vancouver Classification of Postoperative Periprosthetic Femur Fractures



Masri BA. Meek RM. Duncan CP. Periprosthetic fractures evaluation and treatment. Clin Orthop Relat Res. 2004;420: 80 - 95.

Literature Review

- Berry showed the best result with cementless femoral stem, achieving stability in 77% of cases.
- Tsiridis reported cemented stems with impaction bone grafting for B2 & B3 femoral fractures can achieve good results .

Complications

- Aseptic loosening
- Fracture nonunion
- Deep infection
- Pain from cables/wires
- Dislocations
- Sciatic nerve injury

Conclusion

- Revision arthroplasty is treatment of choice when it is fractured.
- Revision with cementless, cemented or cement with impaction allografting are all viable options.
- Implant may be replaced by cemented or cementless prosthesis,
- We recommend a cemented stem for older patients, osteoporotic and radiated bones.

