

RV-006 - SP-PER

READY+ Gold Standard

Study date: xx/xx/2026 (redacted)

DOB / Age: (redacted) · 84 years

Sex: Female

Examined regions & views: Bilateral knees, 8 views total: AP standing (bilateral); PA flexion (bilateral); Right knee AP, oblique, lateral; Left knee AP, oblique, lateral

Image quality: Diagnostic-quality images; appropriate positioning for weight-bearing and flexion views. Metallic fixation hardware partially overlaps the proximal right tibia but overall evaluation of joint spaces and hardware integrity is adequate.

FINDINGS

RIGHT KNEE

- Healed proximal tibial/tibial plateau fracture with internal fixation using lateral plate and multiple cortical/cancellous screws.
- Chronic deformity and irregularity of the lateral tibial plateau articular surface with joint line incongruity/step-off.
- Lateral compartment: near-complete joint space loss with prominent subchondral sclerosis and marginal osteophytes, consistent with severe post-traumatic osteoarthritis.
- Medial compartment: mild–moderate joint space narrowing with lesser sclerosis and osteophytes.
- Overall alignment preserved without gross varus/valgus subluxation on standing views.
- Mild degenerative change with small osteophytes; joint space relatively preserved.
- Lateral plate and screws intact; no hardware breakage identified.
- No definite perihardware lucency to suggest loosening on the provided projections.
- Soft tissues unremarkable. A small joint effusion cannot be excluded on the lateral view (low-confidence).
- No acute fracture or dislocation identified.

LEFT KNEE

- Mild medial compartment joint space narrowing with small marginal osteophytes, compatible with mild osteoarthritis.
- Lateral compartment joint space preserved.
- Possible early degenerative change; no significant joint space loss.
- Fabella projected posterior to the lateral femoral condyle.
- No acute fracture or dislocation identified.

BONE QUALITY (BOTH KNEES)

- Generalized decreased bone mineralization, most compatible with osteopenia.

COMPARISON

No prior knee radiographs are available for comparison.

IMPRESSION

- Right knee: Healed proximal tibial/tibial plateau fracture with plate-and-screw fixation and severe post-traumatic osteoarthritis, most pronounced in the lateral tibiofemoral compartment (near bone-on-bone) with associated chronic articular surface deformity and joint line incongruity.
- Right knee: Mild–moderate medial compartment and mild patellofemoral osteoarthritic changes. No radiographic evidence of acute fracture, dislocation, or hardware failure.
- Left knee: Mild medial-predominant osteoarthritis; no acute osseous abnormality.
- Osteopenia suspected on the basis of generalized decreased bone mineralization.

EMR SUMMARY

Severe right lateral tibiofemoral joint space loss with subchondral sclerosis, osteophytes, and chronic deformity of the lateral tibial plateau deep to fixation hardware, consistent with advanced post-traumatic osteoarthritis. Medial compartment on the right is mildly to moderately narrowed, with only mild patellofemoral change. The left knee shows mild medial-predominant osteoarthritis with preserved lateral compartment and no acute injury. No acute fracture, dislocation, or hardware failure is identified. Underlying bone density appears reduced, suggesting osteopenia. Joint alignment at the right knee is overall preserved, though lateral joint line incongruity reflects the healed tibial plateau fracture. Left knee joint spaces are otherwise maintained and periarticular soft tissues are unremarkable on radiographs. Overall, imaging supports severe post-traumatic osteoarthritis in the right knee and mild, age-appropriate osteoarthritis in the left knee.