Fractures around a hip replacement

Assess the implant as carefully as the fracture.

TRAUMAPLASTY / ADULT TRAUMA

Fracture location, stem stability and remaining bone stock are central to the reconstruction plan.

01 Build the history

Ask about pain or declining function before injury. Obtain implant details, previous operation reports and earlier radiographs. Assess skin, neurovascular status and the patient's general condition.

02 Check implant stability

Compare current and prior images for migration, subsidence or other change. A stem that appears stable on one image may be loose. Plan how stability will be confirmed when the diagnosis is uncertain.

03 Match fixation or revision

A stable stem with adequate bone may permit fracture fixation. A loose stem generally requires a revision-based strategy, often with additional fixation. Poor bone stock increases the reconstructive challenge.

04 Prepare the whole pathway

Involve trauma and revision-arthroplasty expertise. Ensure suitable implants and alternatives are available. Document postoperative loading and rehabilitation according to the achieved fixation and implant stability.

WATCH POINT Misclassifying a loose stem as stable can undermine an otherwise technically sound fracture fixation.

DISCUSS WITH THE TEAM

What evidence supports stem stability, and what is the backup plan if it is loose?

READ THE SOURCES

[1] AO Trauma: Periprosthetic fractures of the hip and knee (2024), expert teaching.
[2] AO Surgery Reference: fracture around a stable femoral stem, definition.

Educational summary for clinicians. Apply local protocols and patient-specific judgement.