



CLINICALLY RELEVANT QUESTIONS

Indications for Revision Hip Replacement Surgery

Current surgical techniques and hip replacement implants provide excellent clinical results and predictable long-term outcomes. All hip replacements, however, have a limited lifespan and may ultimately require revision surgery. At present only about 20% of hip operations are revisions, but the number is expected to increase as the indications for surgery broaden, patient demands increase and the average life-expectancy of patients rises. Patients often ask:



“Why might I need a revision of my hip replacement?”

Indications for revision hip surgery include:

Aseptic loosening: Loosening of the prosthesis without infection present.

What to look out for: Progressively increasing hip pain after many years of comfort. Pain is noted especially when first getting up in the morning and after sitting.

Progressive bone lysis: Gradual bone loss around the prosthesis.

What to look out for: Patients should be encouraged to return to their surgeon at regular intervals for review, especially after 5 years.

Septic loosening: Loosening of the prosthesis due to an infection in the bone. The bone becomes soft or may even dissolve away.

What to look out for: Early after surgery: wound problems. Early intervention is the key to saving the hip replacement. Late after surgery: a history of delayed wound healing or slow initial recovery, combined with fevers and night pain.

Recurrent dislocation: Repeated hip instability.

What to look out for: The patient will usually present to the hospital Emergency Department with a painful hip and a short leg. After multiple episodes, pain may be less, and limb position/length, and/or radiological findings the best indicators.



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Definitions

Aseptic loosening: This usually occurs in the longer-term, i.e. greater than 10 years after initial replacement. It is most commonly associated with wear of a polyethylene weight-bearing surface. Microscopic wear particles of plastic set up a reaction in the surrounding bone, causing gradual softening and dissolving of the bone, which in turn allows movement of the metal hip components

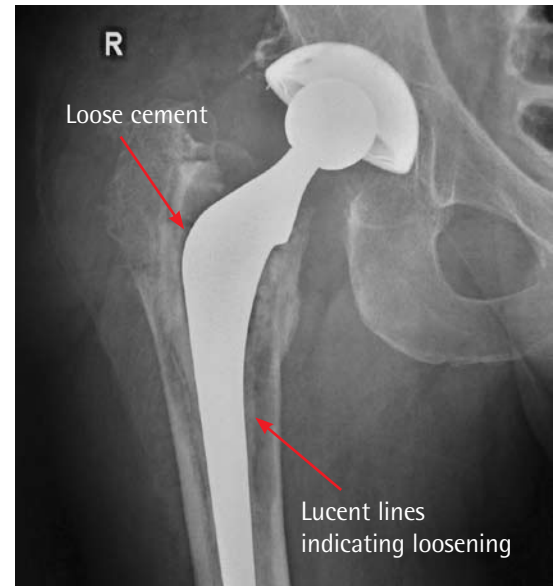
Progressive bone lysis: By definition, bone lysis means loss of bone. In close relationship to a hip prosthesis, and most commonly due to the reactive process mentioned above, bone lysis can ultimately require revision hip surgery. Bone loss can be tracked with serial X-rays; early identification of this problem can make revision surgery considerably easier.

Septic loosening: Early infections, indicated by wound healing problems, wound discharge and/or fever, may necessitate immediate or early return to the operating theatre. Later cases may be difficult to identify, as low virulence organisms may take months or even years to cause sufficient damage to allow prosthesis movement.

Recurrent dislocation: Instability can occur early, due to component malalignment, or late, as a result of aseptic or septic loosening and/or bone lysis when the prosthesis moves.

"Surgeons who elect to perform revision total hip replacement may be faced with many challenges. As a result, pre-operative planning is crucial and includes forming a surgical team with knowledge of revision surgery, having access to appropriate surgical instrumentation and implants and acquiring knowledge... (of) methods of reconstruction."

Sporer, Paprosky & Berry
(Orthopaedic Knowledge Update III, American Academy of Orthopaedic Surgeons, 2006)



Revision Hip Replacement Surgery