

## **Summary**

The essential goal of total hip replacement is restoration of normal function to the diseased painful hip joint, improving the quality of the patients' life. Some factors may lead to failure of this procedure mainly, aseptic loosening of the stem or the cup or both, dislocation, osteolysis, infection & periprosthetic fractures.

Careful selection of the patients and proper preoperative planning for Total Hip Arthroplasty are considered the gold standard to avoid the complex revisions as the wisdom says Prevention is better than Cure.

In this study, a review of the literature considering causes of failure of total hip arthroplasty, evaluation of the patients, revision options and rehabilitation.

Aseptic Loosening is considered the major cause of failed total hip arthroplasty which may occur for the cup or the stem or both, due to disruption of the cement-bone or component-cement interfaces in cemented THA or component-bone interface in cementless THA components. But infection must always be ruled out.

Infection although is less common due to advancement in antimicrobial agents, but considered as the most challenging cause of failure due to its chronic course. Prevention remains the best treatment.

Recurrent Dislocation occurs mainly due to component malpositioning or improper adjustment of soft tissue tension forces around the hip joint.

Periprosthetic fractures occur either around the component or away from it needing good choosing of treatment option.

Careful evaluation of the patients starting by thorough history taking with patient's records revision for type of surgical procedures & implants type, performing a thorough physical examination, conducting appropriate radiographic evaluation and laboratory workout.

Preoperative Planning is performed by revising individual patient's history, physical examination, radiographic evaluation & laboratory investigations, assessment of bony deficiencies, proper templating with the planned surgical components, choosing of surgical approach, ordering necessary tools & equipment.

A variety of surgical options are available in revision arthroplasty of the femoral & acetabular components, the choice of the reconstruction technique may be dependent on the extent of bony defects.

For Infection the gold standard in management is generally considered to be implant removal and thorough debridement with antibiotic therapy delivered systemically and locally with impregnated spacers.

Revision arthroplasty for the treatment of recurrent dislocation is more likely to be successful when a cause for the dislocation has been identified. In addition, the timing of the onset of the dislocation influences the decision concerning treatment, especially with regard to operative intervention.

Revision for Periprosthetic Fractures is a challenge, as it is often accompanied by fracture comminution, bone deficiency, and femoral component loosening. It is associated with poor functional outcome, increased morbidity, and a high incidence of mortality, as well as with elevated economic burden.

The ultimate goal of rehabilitation after total hip arthroplasty (THA) is to maximize functional performance and improve the individual's ability to perform daily activities.