Introduction

Primary total hip arthroplasty is often described as one of the greatest advances in healthcare of the twentieth century. Presently, success rates for total hip arthroplasty at 10 years or longer exceeds 95% survivorship in patients older than 75 years of age **(Older J, 2002)**.

With the increasing life expectancy of our population, more patients are undergoing total hip arthroplasty, and they are generally expected to maintain a higher level of activity. Because of the increasing number of procedures performed, the number of revision THAs is expected to increase in the near future **(Mahomed et al, 2003).**

It is estimated that more than 20% of all hip arthroplasties will need to be revised, which translates into 30,000 to 50,000 hip arthroplasty revisions yearly. Revision total hip arthroplasty, constituting close to one quarter of all total hip arthroplasties performed in US, places immense financial burdens on the health care system and has less favorable outcomes than primary total hip arthroplasty **(Berry et al, 2002)**

Aseptic loosening and Osteolysis, resulting from failure of bearing surfaces, constitute a common reason for revision total hip arthroplasty. These are failures that typically occur relatively long after the primary implantation. Other causes of failure that occur at an earlier time point include implant-related problems such as delamination of the porous coatingor other manufacturing problems **(Yue &Duffy, 2009)**

Patient-related factors leading to the failure of total hip arthroplasty include comorbidities such as sickle cell anemia, poor bone quality, or other patient factors that predispose the patient to infections or dislocation **(Cluett J. 2009)**.

Surgical technique may affect the outcome of total hip arthroplasty. The influence of surgical technique is likely to be greater than previously believed, as many revisions

are required because of recurrent dislocation, malposition of the components, or other technical problems **(Alberton et al, 2002)**.

Deep infection after THA is also a common reason for patients to undergo an eventual revision procedure after the infection has been cleared **(Senthi et al, 2011).**

Surgeons spend a tremendous amount of time deciding on the technique for the procedure and on prosthesis selection when contemplating a revision. However, the entire decision making process regarding when to revise a hip arthroplasty needs to be clearly understood and evaluated in individual circumstances **(Yue &Duffy, 2009).**

Revision hip replacements are more complicated surgeries and the outcomes are not as good as the first hip replacement. Technical problems include the quality of the bone and the ability to adequately secure the revision hip replacements into position. Furthermore, removing the old hip replacement can necessitate more extensive surgery. Another problem with revision hip replacement is that the surgery itself can be more complicated. Patients tend to be older, and less tolerant of long surgical procedures. The procedure is technically more difficult that primary hip replacements and the effects on the patient are more significant (longer surgery, more blood loss). Because of this, revision hip replacement must be carefully considered and planned. Involvement of general medical doctors, anesthesiologists, and the orthopedic surgeon are all important **(Cluett J. 2009)**.