

HIP REPLACEMENT SURGERY

Hip replacement surgery involves replacing the worn out ball and socket of the hip joint and replacing it with artificial surfaces. There has been much innovation in orthopedic surgery. We have moved through cycles of replacing only the surface of the ball (surface replacement) to replacing the ball with an attached stem and mating with a socket to complete the artificial joint and back again to replace only the surface in some selected young patients.

Hip joints are commonly approached by an incision on the side of the femur or thigh bone. I often use an anterior or antero lateral approach which has been shown to have a lesser incidence of dislocations of the artificial hip joint in the early post operative period. With the posterior approach, the approach used by most surgeons in the US, is one I favor for revision hip surgery. The hip joint is approached from the back although the actual skin incision remains on the side of the upper thigh.

Recently, media attention has been directed toward mini incision surgical procedures, double incision hip replacement and surface replacement hip procedures. Long term studies have shown varying benefits to the above. While I have performed all of these procedures, I do not use any particular one as a routine for every patient. Rather, I select the implant and approach on an individualized basis to maximize surgical outcomes for my patients.

As with any major procedure, the long term results of hip replacement surgery do carry certain risks including infection, loosening with or without infection and dislocation. Infection of the hip joint after surgery is usually less than 1% in most patients. Dislocation of the artificial hip is also uncommon but can occur, often a result of wearing out of the joint surface. This is also known as polyethylene wear. Over the course of time, wearing out of the articulating surface, which was commonly made of very dense plastic or polyethylene, occurs. Just as a linoleum floor wears a tread path, or the tires on your car wear their tread out, the plastic liner of the hip joint can also wear out. To counter this, researchers developed ultra high molecular weight plastic and then irradiated this to make it even less likely to wear. Another prosthetic option was ceramic liners, but these, like your crockery, have a tendency to fracture, so much so that it is impossible to remove all the pieces from the body after a shattering fracture of a ceramic implant. Finally we come full circle again, to using highly polished metal (chrome surfaced) balls in a chrome liner. Initially they were not smooth enough but with technological advancements, there has been a resurgence in these metal on metal joints. Now we can use larger sized metal balls which in turn have a reduced tendency to dislocate.

Dislocation was either due to poorly positioned and tensioned implants or from wearing out of the plastic liners and possible associated loosening, secondary to this wear. Although metal on metal may appear to be a panacea, there are still proponents of ceramic and even the ultra high molecular weight polyethylene has its role. There are concerns over release of metal ions into the blood stream and its connotations in pregnant women/women of child bearing age, or in patients with impaired renal function etc, concerns that have yet to be addressed.

I tailor my approach and choice of implant according to my patient's individual needs and requirements, hence minimizing the risk and chances of dislocation and wear. I have followed

the latest techniques and joined in discussions at different stages and levels of research. I am a member of the American Association of Hip and Knee Surgeons, who meet every year to discuss procedure and technology advancements and avoidance of complications. The surgical outcomes of my patients speak to the benefits of this individualized, state-of-the-art approach to their care.