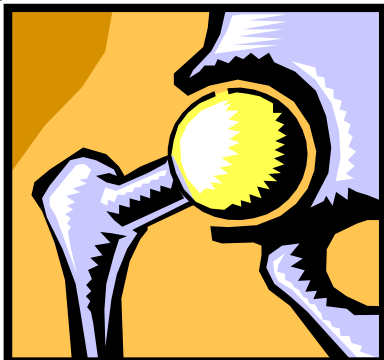


**Bionic Boomers: Why Hip Replacements are All the Rage**

Everyone is getting a hip replacement these days - or so it seems. And not just the elderly. Last winter I was blown away to see an acquaintance flash by on the Hillside ski trails – skate skiing at a furious pace with no poles – on a brand new titanium hip. This took place just months after she'd been bedridden as a result of extreme pain in multiple joints. She had her life back!

Hip replacement or arthroplasty is a surgical procedure in which diseased parts of the hip joint are removed and replaced by artificial parts, bringing relief from pain and restoring mobility. Since new high-tech prostheses can withstand more stress and strain than their predecessors, younger more active people are getting fitted. By 2030, the demand for first-time total hip replacements in the U.S. is expected to increase 174% to 574,000, while the demand to have hip replacements re-done will double over the next decade.¹

Who needs it?

In a healthy person, the ends of the bones forming a joint are protected by a cushion of cartilage, allowing smooth movement with minimal friction. If the cartilage is damaged by disease or injury, tissues become inflamed and worn down, and pain results from the friction of bone on bone. Rheumatoid arthritis, bone tumors, or poor blood supply can also break down the hip joint. Non-surgical strategies such as a walking cane, medication, and physical therapy can provide temporary relief, but when pain starts to disturb sleep or restrict activity, surgery may be indicated.²

How is it done?

In a total hip replacement, the surgeon cuts away the ball part of the thigh bone (femur) and removes damaged cartilage and bone from the socket of the pelvis. An artificial replacement or prosthesis composed of a ball attached to a stem is then wedged into a hollowed-out space in the end of the femur and a new cup-like component is fitted into the pelvis. These implants, made of metal, plastic or ceramic are either fastened with bone cement, or simply press-fitted until new bone gradually permeates the porous surface. All artificial joints must be approved by the FDA before they can be tested and marketed.³ Minimal incision hip replacement may be an option for patients who are lean, active and otherwise healthy. This method causes less pain and allows faster recovery. Because it's difficult to extract and replace a worn-out artificial hip, doctors advise patients to delay total hip replacement as long as possible.

A new option for younger patients is hip resurfacing which preserves and reshapes the femoral ball, then caps it with a metal prosthesis.³ This confers similar benefits in the short term, but preserves enough bone for total hip replacement later. A recent study⁴ shows that after this surgery, patients were able to resume a high level of sports activity such as downhill skiing, tennis, and contact sports. However, it is still too early to assess joint loosening and rates of revision surgery following this treatment.

What about recovery?

Patients are taught exercises within a day or so to reduce fluid which builds up in the lungs during surgery, and to strengthen the hip prior to sitting and walking – which is usually possible after only a few days. The hospital stay averages 10 days, but full recovery may take 3 to 6 months. Minimal incision techniques can halve these times.

What can go wrong?

Dislocation can occur if the smaller artificial ball becomes dislodged outside the socket. Movements such as pulling the knees to the chest are risky in this regard. The most significant long-term problem is osteolysis, the breakdown of surrounding bone tissue due to inflammation caused by tiny particles shed from the prosthesis.² Anti-inflammatory drugs are used to treat this condition, but the joint may ultimately need to be replaced. Infection is another risk, and nerves or blood vessels can be damaged during surgery though this is rare. Minimize complications by having the operation performed by an experienced surgeon. "What to ask your surgeon"³ is a useful check list for those considering this surgery.

But the good news is:

Research is developing better surgical techniques, materials, prosthesis designs, and new recovery and rehabilitation programs for home and hospital. Hip replacements are already 90 percent successful, and a new hip should be good for 15 to 20 years. At the rate of roughly a million steps a year, that's pretty good!

Resources

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