台大醫院骨科 林 晉

Surgical treatment of degenerative osteoarthritis

Different surgical procedures are available as a final measure to relieve pain and increase functions in patients with osteoarthritis. Certain surgical procedures can help if conservative treatments fail. Even with these procedures, however, artificial joint replacement is still the mainstay of the treatment later on.

Arthroscopy and Debridement

Arthroscopy is performed to clean out bone and cartilage fragments (debridement) that, in theory at least, may cause pain and inflammation. Research and debate continues on whether arthroscopy provides true benefits for those with osteoarthritis.

Realigning Bones (Osteotomy)

Osteotomy is a surgical procedure used to realign bone and cartilage and reposition the joint. If only a certain section (the medial compartment) of the knee is damaged and deformed by osteoarthritis, the surgeon may choose to perform an osteotomy.

Fusing Bones (Arthrodesis)

If the affected joint cannot be replaced, surgeons can perform a procedure called arthrodesis that eliminates pain by fusing the bones together. The patient must understand, however, that fusing the bones makes movement of the joint impossible. Bone fusion is most often done in the spine and small joints of the hands, ankles and feet.

Joint Replacement (Arthroplasty)

When osteoarthritis becomes so severe that pain and immobility make normal functioning impossible, many people become candidates for artificial (prosthetic) joint replacement called arthroplasty. Hip replacement is the most established and successful replacement procedure, followed by knee replacement. Other joint surgeries (such as spine, shoulders, elbows, wrists, and fingers) are less common.

Minimally Invasive Arthroplasty. Surgeons are exploring a variety of new techniques for a "minimally invasive" approach to knee and hip arthroplasty. The goal is to give the patients a shorter recovery time and less postoperative pain.

Unicompartmental (unicondylar) Knee Arthroplasty. The procedure involves a small incision and insertion of small implants. This may be useful in cases of limited knee damage. It is recommended for relatively

sedentary patients who are 60 years or older and not obese. It may relieve pain and delay the need for a total knee replacement.