Surgical Options for Knee Arthritis

When non-surgical treatments for knee arthritis fail, you and your doctor may consider surgery. Learn about which surgical options are optimal for treating osteoarthritis in your knee.

Arthroscopy
Arthroscopy involves a surgeon making a small incision in your knee and irrigating and removing loose pieces of cartilage. In the arthritic knee, there is a very limited role for an arthroscopy. Results of a “clean out” or a “wash out” are unpredictable at best and should be avoided.

Osteotomy
This procedure involves cutting the bone and reorienting the alignment of the knee. It has traditionally been reserved for younger patients with malaligned knees who participate in high-demand activities such as sports. Osteotomy has fallen out of favor due to inferior results compared to knee replacements. There are some newer technologies that may improve outcomes, but currently osteotomy has a limited role in the treatment of osteoarthritis of the knee.

Cartilage Procedure
This procedure involves harvesting cartilage cells and transplanting them into the area of disease in your knee. While appealing in concept, there is very little role for this procedure in an arthritic knee and has no role to play in the treatment of the advanced arthritic knee.

Partial Knee Replacement
A surgeon performing a partial knee replacement, also known as “uncompartmental” knee replacement, replaces only the part of the knee that is worn out. This can be either the knee cap-femur joint (patello-femoral) or more commonly – the femur-shin joint (femoral-tibial). These procedures are appealing because they are generally less invasive, more normal tissue is retained, and recovery is easier.

The ideal candidate for these procedures is an evolving topic. Issues of location and amount of disease as well as the amount of deformity present are important considerations. Newer technologies such as computers, robots and custom guides have been introduced to this concept in attempts to improve outcomes. The influence of these technologies has yet to be determined. Outcomes of partial knee replacements can be comparable to total knee replacements ten years after surgery.

Total Knee Replacement
Total Knee Replacement (TKR) is the gold standard when conservative treatment for arthritis of your knee has failed. This procedure involves resecting the ends of the bones of the knee and replacing them with a combination of metal and plastic. The procedure is one of the most successful of all surgical procedures. On average, TKR provides 90-95% pain relief and has a 1-2% complication rate. Approximately 90% of replaced knees will be satisfactory twenty years after surgery.

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