MAKOplasty[®] Partial Knee Resurfacing



MAKOplasty[®] Partial Knee Resurfacing is a new procedure designed to provide quicker recovery and improved surgical outcome for patients with joint degeneration in only one part of the knee. By selectively targeting the portion of the knee that has been damaged by osteoarthritis, surgeons can resurface the damaged area without compromising the healthy bone and tissue surrounding it.

This procedure is made possible through a surgeon-controlled robotic arm using the MAKO Tactile Guidance System[™]. This system allows the surgeon to pre-operatively determine the damaged area of the bone to be removed and to plan the precise alignment and placement of the resurfacing implant using a CT scan taken of the patient's knee. During surgery, this plan is carried out utilizing a 3-D visualization system coupled with an intelligent cutting tool that provides the surgeon with visual, tactile and auditory feedback throughout the procedure. This level of consistently reproducible precision enables surgeons to restore knee function by resurfacing the arthritic defects rather than replacing the entire knee, all within a 2-3 inch incision.







Restoring Quality of Life Through InnovationSM

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For more information, please visit us at www.makosurgical.com MAKOplasty[®] Partial Knee Resurfacing

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The MAKOplasty[®] Partial Knee Resurfacing procedure is designed to relieve the pain caused by joint degeneration and potentially offers the following benefits:

- Improved surgical outcomes
- Less implant wear and loosening
- Joint resurfacing
- Bone sparing
- Smaller incision
- Less scarring
- Reduced blood loss
- Minimal hospitalization
- Rapid recovery

Individual results may vary. There are risks associated with any knee surgical procedure, including MAKOplasty[®]. Your doctor can explain these risks and help determine if MAKOplasty[®] is right for you.

Q: What is the MAKOplasty® procedure?

A: The MAKOplasty® procedure is an FDA-cleared treatment option for patients who suffer from osteoarthritis damage in the medial (inner) portion of the knee. Using the newly developed Tactile Guidance System[™], surgeons are able to perform this procedure through a 2-3 inch incision as opposed to the 8 inch or larger incision required for traditional total knee replacement surgery. Only the diseased portion of your knee is removed, leaving the healthy bone and tissue surrounding it untouched. An implant is then secured in your knee joint that will allow your knee to move smoothly again. Like other knee resurfacing procedures, MAKOplasty[®] is typically covered by health insurance.

Q: Who would be a good candidate for the MAKOplasty[®] procedure?

- **A:** Although the best treatment for each patient must be determined individually, typical MAKOplasty® patients share the following characteristics:
 - Pain while standing or walking short distances
 - Knee swelling
 - Knee locking or giving out during activity
 - Failure to respond to non-surgical treatment such as rest, weight loss, physical therapy and non-steroidal anti-inflammatory medication

Q: If I have these symptoms, could osteoarthritis be to blame?

A: Yes. Osteoarthritis is the most common type of arthritis. It is a degenerative bone disease that causes the cartilage found on healthy joints to break down removing the buffer between bones. This often causes pain during normal daily activities and can eventually cause loss of motion and malalignment of the knees.

Q: How can you determine if I am a candidate for the MAKOplasty[®] procedure?

A: The first step is to get your complete medical history including your symptoms, when they began, how they have progressed and any non-surgical treatment(s) you have tried. Your physician will then perform a thorough examination of your knee joint. He/she will observe your knee while you are standing and walking, examine your knee, hips and ankle alignment, and evaluate your range of motion, ligament stability and angular deformity. If surgery might be the best option for you, a weight-bearing X-ray will be obtained to determine the extent of damage in your knee.

Q: What are the benefits of this new technology?

A: Results have shown that the MAKOplasty® procedure allows patients to experience a shorter hospital stay, minimal blood loss, quicker rehabilitation and a smaller scar. In addition, many MAKOplasty® patients are able to return to an active lifestyle within weeks of the procedure.

Q: If I decide to undergo a MAKOplasty[®] procedure, what is the experience like?

A: First, you will be scheduled to have a CT scan taken of your knee. This provides us with the information we need to properly determine the damaged areas that need to be removed for the precise placement of your knee implant. The actual surgery will last approximately one hour and the average hospital stay is less than 24 hours. You will be permitted to walk soon after surgery, and most patients are back to normal daily activities such as driving a car within two weeks.

Q: How long can I expect the implant used in a MAKOplasty[®] procedure to last?

A: All implants have a limited life expectancy that depends on several factors including a patient's weight, activity level, quality of bone stock and compliance with the doctor's orders. However, alignment and positioning are also very important factors affecting the life expectancy of an implant. By using the MAKO Tactile Guidance System™, we aim to achieve the optimal alignment and positioning for your implant to help it last as long as possible. In addition, because very little bone is actually removed during a MAKOplasty® procedure, the implant can be replaced with another procedure such as a total knee replacement in the future, if necessary.