Minimally Invasive Surgery (MIS) for Hip and Knee Replacement is an advancement in joint replacement that offer important advantages over standard surgical procedures. MIS procedures and surgical instruments are designed to help surgeons do their very best to help you recover and get back to your regular daily lifestyle as quickly as possible. These techniques bring together a wide variety of hip and knee implants, new minimally invasive surgical techniques, and new instrumentation.

**MIS Total Hip Replacement**

The direct anterior approach is a minimally invasive technique used in hip replacement surgery. Continuing orthopaedic experience suggests that this procedure may offer several advantages over the more traditional surgical approaches to hip replacement, such as a smaller incision, reduced post-operative pain, and faster recovery and rehabilitation.

Traditional hip replacement techniques involve operating from the side (lateral) or the back (posterior) of the hip, which requires a significant disturbance of the joint and connecting tissues and an incision approximately 8-12 inches long. In comparison, the direct anterior approach requires an incision that is only 4-6 inches in length and located at the front of the hip. In this position, the surgeon does not need to detach any of the muscles or tendons, allowing for a more natural return to normal function and activity.

There is also the potential for rehabilitation to be quicker and hospital stays to be shorter because the hip is replaced with minimized detachment of the muscles from the pelvis or femur. The smaller incision and reduced muscle disruption mean that patients may also have a shorter recovery time and less scarring. With this approach and the minimization of the tissue damage, there may also be less blood loss, less time in surgery and reduced post operative pain.

Traditional hip replacement techniques also require patients to take special precautions to prevent dislocation of the prosthesis, like not crossing your legs, not bending your hips more than a right angle, not turning your feet excessively inward or outward and using a pillow between your legs at night when sleeping. Following the anterior approach, the risk of dislocation may be reduced. Under doctor supervision, patients may be immediately allowed to move their hips and potentially avoid these restrictions, which can mean fewer complications resulting from immobilization.

Hip replacement, no matter how minimally invasive, is a major surgery, and patients are at risk for complications. However, the complication rate following joint replacement surgery is very low. Serious complications, such as joint infection occur in less than 2% of patients.

**Unicompartmental (partial) Knee Arthroplasty**

Knee replacement is a surgical procedure that decreases pain and improves the quality of life in many patients with severe osteoarthritis. Typically, patients undergo this surgery after non-operative treatments have failed to provide relief of symptoms. Patients with osteoarthritis that is localized to just one part of the knee may be candidates for unicompartmental knee arthroplasty (UKA), also known as partial knee replacement. Surgeons have performed total and unicompartmental knee arthroplasty for over three decades with excellent results.

Traditional knee replacement involves a 7-8 inch incision over the knee, a hospital stay of 3-5 days, and a recovery period lasting 1-3 months during which the patient walks with a walker or cane.

In the last year or two, surgeons and their patients have become very enthusiastic about an exciting new approach to this well-established procedure. Minimally Invasive UKA is a surgical procedure that allows a partial knee replacement to be inserted through an incision about 3 inches in length, with minimal damage to the muscles and tendons around the knee. Only the side of the knee that is having problems is replaced.

The small size of the incision and the less-invasive nature of the surgical approach allows surgeons to perform UKA as an outpatient procedure, and allows patients to recover much more quickly. Patients also experience less blood loss and substantially less pain than traditional knee replacement, and often walk unassisted (with no cane or walker) within 1-2 weeks of the operation. Even many patients who have both knees done at once with UKA technique are able to walk without the assistance of a walker or cane fairly quickly. In addition, because the bone, cartilage, and ligaments in the healthy parts of the knee are kept, most patients report that a UKA feels more natural than a total knee replacement.

Although these MIS approaches make sense for some patients, only your surgeon can help you decide what is best for you. Talk to J. Lex Kenerly, M.D., Orthopaedic Surgeon, and the staff at the Bone & Joint Institute of South Georgia if you have questions about the MIS approach for total hip replacement, unicompartmental knee arthroplasty or joint replacement in general.

The Bone and Joint Institute of South Georgia, is a 15,000 square foot state-of-the-art facility with on-site X-Ray, MRI and ambulatory surgery center, providing comprehensive orthopaedic care in a single facility. Dr. Kenerly has expertise in a wide variety of orthopaedic and sports medicine services, such as hip and knee replacement, treatment of ACL tears, ankle sprains, rotator cuff tears, carpal tunnel syndrome, hip bursitis, heel pain, knee cartilage tears, tennis elbow, trigger finger and bunions, fracture treatment and more.

From a sprain to a severe injury requiring surgery, the Bone & Joint Institute of South Georgia is your first choice for comprehensive, compassionate orthopaedic care.