What is Arthroscopic Knee Surgery?

In the late 1970s and early 1980s, arthroscopic surgery became popular, especially in the sports world, as fiber-optic technology enabled surgeons to see inside the body using a small telescope, called an "arthroscope," which projects an image to a television monitor. Thanks to ongoing improvements made by technology leaders like Smith & Nephew, arthroscopic surgery is now accessible to more people than just professional athletes. In fact, active patients all over the world have experienced the benefits of minimally invasive surgical procedures.

Arthroscopy may be used for a variety of knee joint conditions, including a torn meniscus, loose pieces of broken cartilage in the joint, a torn or damaged anterior or posterior cruciate ligament (ACL/PCL), an inflamed or damaged synovium (the lining of the joint), or a misalignment of the patella (knee cap).

Through an incision the width of a straw tip, your surgeon is able to insert a scope, which allows him or her to inspect your joint and locate the source of your pain. The scope can also help identify tears or other damage that may have been missed by an X-ray or MRI. Your surgeon will then make one or more small incisions to accommodate the instruments used to repair the knee. These instruments can shave, trim, cut, stitch, or smooth the damaged areas.

Arthroscopic knee surgery is often performed in an outpatient surgery centre, which means no overnight hospital stay is required. Patients report to the surgical center in the morning, undergo the procedure, and – following a recovery period under the care of medical professionals – return home later in the day.

Who is a Candidate for Arthroscopic Knee Surgery?

Patients with knee pain or limited knee function may be candidates for arthroscopic knee surgery. Most people who suffer from a knee injury or degeneration and who have not found the relief they need through no operative treatments can benefit from a minimally invasive procedure. The information here will help you to better understand the anatomy and function of the knee, as well as the effects on the knee of a meniscus tear and ACL damage. In addition, it will guide you through the steps of arthroscopic knee surgery, which is used to treat these conditions.

Nonsurgical Options / Reasons for Surgery

Nonsurgical Options

There are several non-operative, conservative options to consider for treatment of a meniscus tear or ACL damage to the knee:

1. **Lifestyle Modification.** Weight loss, modification of exercise, and avoidance of aggravating activities can prevent further injury.

2. **Rehabilitation.** Specifically prescribed exercises can improve strength and flexibility in the quadriceps and hamstring muscles.

3. **Anti-inflammatory Medications.** Decrease swelling in the joint and provide temporary relief of pain. Please note, however, that all medications have risks and should be taken only in consultation with your pharmacist and physician.

4. **Bracing.** A sleeve-like brace that fits firmly around the knee can provide support.

Reasons for Arthroscopic Knee Surgery?

Minimally invasive knee surgery is considered when all other conservative measures have failed. It's a positive measure to regain your active lifestyle, which knee damage has negatively affected over a period of weeks, months or even years.

Arthroscopy surgery can:

- Relieve pain.
- Improve joint stability.
- Repair tears and damage.
- Maximize quality of life.
- Optimize activities of daily living.

Minimally Invasive Knee Surgery

Meniscal Repair

The Smith & Nephew FASTFIX◊ Meniscal Repair System makes meniscus repair procedures quicker and easier for surgeons to perform.

Most meniscus tears are small, and the torn portion is removed, leaving a smooth, stable surface. Occasionally, other problems are found during arthroscopy, such as cartilage damage or loose fragments, and these may also be treated during surgery.

Certain meniscus tears must be repaired. Historically, during a meniscal repair procedure, stitches were placed from the interior of the knee outward, and incisions were made at the joint line to allow for tying of the knots. In recent years, an instrument was introduced that includes pre-loaded surgical implants that are absorbed in the body over time, as well as a pre-tied knot. With this innovative device, meniscal repair can be performed without the need for additional incisions.

Preparation for Arthroscopic Knee Surgery

Preparation for your surgery begins weeks and sometimes months before the surgery date. Here are just a few events and considerations you may experience:

1. **Initial Surgical Consultation.** Preoperative X-rays, a complete medical history, a complete surgical history, and a complete list of all medications (i.e., prescription, over-the-counter, vitamin supplements) and allergies will be reviewed.

2. **Complete Physical Examination.** Your surgeon will perform a physical examination and determine if your internist or family physician should assist with optimization of medical conditions prior to the surgery. This will ensure that you are in the best physical condition possible on surgery day.

3. **Physical Therapy.** In some cases, instruction in an exercise program to begin prior to surgery, as well as an overview of the rehabilitation process after surgery, will better prepare you for postoperative care.

4. **Preparation for Surgery.** You may want to wear loose-fitting clothes or sweat pants, and also bring crutches. You should bring your insurance information and a list of all your medications and dosages as well as drug allergies. You will need to arrange for someone to drive you home.

5. **Evening Before Surgery.** Do not eat or drink after midnight. Your surgeon or anaesthesia provider may recommend that you take some of your routine prescription medications with a sip of water.

This is a brief overview of the activities that typically occur on your surgery day:

1. You will be admitted to the hospital or surgery centre.

2. Your vital signs, such as blood pressure and temperature, will be measured.

3. A clean hospital gown will be provided.

4. An IV will be started to give you fluids and medication during and after the procedure.

5. All jewellery, dentures, contact lenses, and nail polish must be removed.

6. Your knee will be scrubbed and shaved in preparation for surgery.

7. An anaesthesia provider will discuss the type of anaesthesia that will be used.

8. Your surgeon will confirm and initial the correct surgical knee and site.

Postoperative Care / Rehabilitation

Postoperative Care

After surgery, you will be transported to the recovery room for close observation of your vital signs and circulation. You may remain in the recovery room for a few hours.

When you leave the hospital, your knee will be covered with a bandage, and you may be instructed to walk with the assistance of crutches. You also may be instructed to ice or elevate your knee.

Your surgeon will likely provide further details regarding postoperative care for your specific procedure.

Rehabilitation

Steps for rehabilitation following a meniscus repair or an ACL procedure vary from physician to physician. To learn what activities will be involved in your own rehabilitation, consult your orthopaedic specialist.