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## **Knee Arthroscopy** *Risks and Benefits*

**Dr. Faryniarz** will review treatment options and realistic expectations for your surgery. Any surgical procedure has risks, which vary based on the extent of your injuries and the type of surgery you have. Your doctor takes precautions to minimize these risks. Please make sure you ask your doctor any questions you may have about the procedure and post-procedure care.

In general, **knee arthroscopy** is an extremely safe and successful procedure with few complications.

### Common Occurrences

1. **Bruising** around the knee, the back of the leg, lower leg, or thigh can occur and responds well to ice and elevation.
2. **Swelling** is common after surgery. Icing your knee and elevating your leg are extremely helpful.
3. Portal discomfort/**fluid leak** – Soon after surgery the small arthroscopic skin incisions may leak watery fluid used during the procedure. This is normal. The portal scar may feel nodular as the incisions heal; this generally resolves over time.
4. Anterior knee pain (“patellofemoral syndrome”). Some patients may develop new symptoms or exacerbation of current symptoms during the course of their rehabilitation.
5. Persistence of joint symptoms. Patients with arthritis have variable results -- some patients enjoy significant benefits from surgery, others do not. Preoperatively, it is difficult to determine how a given patient will respond to surgery. Your doctor will review your unique knee history and anatomy to give you the best results. Your careful attention to early post-operative knee care instructions and the post-procedure rehabilitation guide will give you the best results from any procedure.

### Reported **complications** include:

1. **Bleeding** into the knee joint after surgery can cause pain, swelling, and warmth, and may require drainage (aspiration) in the office.
2. Persistent **swelling** (fluid in the knee) – this may occur in arthritic knees possibly requiring periodic aspiration or injection with cortisone (an anti-inflammatory medication).
3. **Infection** –skin (superficial) or joint (deep) infections happen in less than 1/250 cases. Skin infection generally responds to oral antibiotics. Deep infections usually require hospital admission for intravenous antibiotics, and surgery to wash out the joint (either by arthroscopy or an open procedure).

4. **Blood clots** (phlebitis, or deep vein thrombosis [DVT] causing leg swelling) – just as in any other surgery involving the lower extremity, blood clots may form in the leg. Diagnosis usually requires an ultrasound study of the leg, and treatment typically requires use of a blood thinner, initially by injection, then orally.

**DVT** may occur in up to 1/20 outpatient arthroscopic knee procedures. You can help minimize risk by moving your foot up and down after surgery and with early activity after surgery.

Certain patient factors can predispose to DVT – these include a prior personal or family history of DVT, cancer, obesity, smoking, use of birth control pills or patches, hormone replacement therapy, varicose veins, and age over 65. Certain blood problems known to cause clots make phlebitis more likely to occur and may require special preventive treatment around the time of surgery – be sure to let your doctor before your procedure if you have any of these problems: protein S, protein C, anti-thrombin III, or other clot-forming problems.

5. **Pulmonary embolus** is a very uncommon problem (under 1/100 cases) It occurs when a DVT (blood clot) breaks up and travels to the lungs, causing sudden shortness of breath, rapid heartbeat, and very rarely, sudden death.

6. **Knee ligament strain** is a rare complication. Stress applied to the knee while under anesthesia can stretch the side ligaments of the knee. Typically this heals without need for surgery.

7. **Broken instruments**, another rare complication, may require arthroscopic or open surgery for removal.

8. **Synovial fistula** is a rare occurrence. The skin at the arthroscope insertion site may heal incompletely, resulting in a fluid leak from the joint through the skin.

9. **Nerve injury** is also rare. Injury to a nerve in the leg may occur, with complete recovery, or partial or complete permanent injuries. When the meniscus needs suturing, an additional surgical incision and a nerve/blood vessel protective retractor are used. Injury to the saphenous nerve along the inner aspect of the knee can result in permanent numbness along the side of the lower leg and foot. Injury to the common peroneal nerve may cause in a foot drop, requiring a brace and/or surgery.

10. **Vessel injury** –A significant injury to a blood vessel would require immediate repair by a vascular surgeon and hospitalization. Fortunately, this is an extremely rare complication.

11. **Tourniquet palsy** – Inflation of a thigh tourniquet during surgery minimizes bleeding and maximizes visibility during surgery. A tourniquet time over 2 hours can lead to temporary foot numbness and tingling, which usually resolves after 24 hours.

12. **Reflex sympathetic dystrophy** is very rare. This chronic, painful condition occurs after surgery, and requires referral to a pain clinic, prolonged rehabilitation, and epidural spinal pain blocks.

13. **Compartment syndrome** is also rare. Fluid leaks from the knee into the muscle compartments of the leg can cause massive swelling and compression of the blood vessels and nerves of the leg. Emergency surgical decompression of the muscular compartments would be necessary.

14. **Equipment failure**. Arthroscopic surgery is “high tech” and extremely demanding. The surgery is performed while observing the magnified images of the knee joint structures on a television screen. Motorized equipment (cameras, light sources, video recorders, etc.) could possibly malfunction resulting in the inability to complete your surgery. In our operating room we have back up systems should this occur.

15. **Failure of repair**. There is a chance that the structure repaired may fail. Failures can occur due to poor tissue or bone quality, failure of a device, or failure to comply with the post-operative instructions. It is important to follow your instructions and rehabilitation protocol to increase the rate of success of your surgery.