

Marc R. Safran, MD Professor, Orthopaedic Surgery Chief, Division of Sports Medicine

## MENISCUS SURGERY

### **INDICATIONS** (Who Needs Surgery, When, Why & Goals)

- Surgery for meniscal tears is reserved for people who have symptomatic tears of the meniscus, including locking, recurrent swelling and giving way of the knee and who have failed conservative treatment for the tear. Occasionally it is also recommended for patients with pain along the knee joint where the meniscus is. It is also recommended for those with displaced tears that prevent full knee range of motion ("locked knee") which is a sign of a "bucket handle tear". A bucket handle tear is when the meniscus tears and flips to the center of the knee like moving a bucket handle from one side of the bucket to the other.
- Surgery is performed electively, except locked knees should be operated upon at the earliest convenient time. The success of meniscus repair has not been shown to be any better immediately after injury as compared with a couple of months later.
- Only the outer 10 30% of the meniscus cartilage has blood supplying it. Blood is needed to help a meniscus heal. Because of this, less than 20% of all meniscus tears are "repairable" by suturing (sewing) it together. The rest of the tears are treated by meniscectomy (removal of all or part of the meniscus).
- A torn meniscus usually does not heal itself, unless the tear is in the outer portion of the meniscus where the blood supply is. Thus, most tears do not heal on their own. Further, meniscus cartilage that is removed does not regenerate. Once removed, it is gone.
- The success of meniscus repair (healing of the tear) is about 80% in knees with an intact anterior cruciate ligament (ACL). However, meniscus repair when the ACL is torn and not reconstructed is only 40%. Thus, if the meniscus tear is repairable, most surgeons also recommend reconstructing the ACL. Age of the patient has no effect on healing of a repair.
- Since one function of the meniscus is to distribute joint forces, loss of meniscus cartilage is associated with the early development of arthritis of the knee joint. Thus the goal of meniscal surgery is to eliminate the symptoms in your knee while trying to save as much of the meniscus cartilage as possible. This would be by repairing the meniscus, if possible, or removing as little of the meniscus as possible.
- Removing all or part of a torn meniscus allows for contouring of the cartilage and removal of torn edges that prevents (1) progression of the tear (making a smaller tear larger), (2) displacement of the tear causing recurrence of symptoms of locking and giving way and swelling.
- Leaving a torn meniscus in the knee if it does not cause symptoms is usually not a problem. However, torn meniscus cartilage does not function and thus the development of arthritis or developing symptoms such as locking, swelling and giving way still may occur. Further, tears may progress to become larger tears if left untreated..

## **CONTRAINDICATIONS** (Reasons Not To Operate)

- Infection of the knee,
- Inability or unwillingness to complete the post-operative program (for meniscus repair) or to perform the rehabilitation necessary.
- Pain or symptoms not related to the meniscus
- Arthritis of the knee with symptomatic meniscus tear should not have meniscal repairs

# DEPARTMENT OF ORTHOPEDIC SURGERY SPORTS MEDICINE

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#### RISKS AND COMPLICATIONS OF SURGERY

- Infection
- Bleeding
- Injury to nerves (numbness, weakness, paralysis)
- Recurrence of symptoms (giving way, locking or swelling) including tearing the remaining meniscus if meniscotomy performed and re-tear or non-healing of the meniscal repair.
- Knee stiffness (loss of knee motion)
- Continued pain
- Weakness of the quadriceps muscles

## **TECHNIQUE** (What is Done)

Arthroscopy has become the standard way of operating on meniscal tears. This is done as an outpatient (go home the same day) and may be done under general anesthesia, spinal anesthesia or local anesthesia. Small shavers and cutting instruments are used to remove and contour torn cartilage that is not repairable. For tears that are repairable, the edges of the tear are freshened, then sutures (to sew) are used to hold the torn edges together while the meniscus heals.

#### POST-OPERATIVE COURSE

- Keep wound clean and dry in the initial post-op period
- Keep foot and ankle elevated above heart level as much as possible for the first 1 to 2 weeks after surgery
- You will be given pain medications by your physician
- Icing the knee will help reduce swelling.
- You may put as much weight on the operated leg as possible, though often you will be given crutches after surgery until you can walk without a limp.
- For meniscus repair, you may be given a brace and possibly be allowed to bear full weight on the operated leg while you are wearing the brace on your operated leg for varying lengths of time (depends on your physician)
- Post-operative rehabilitation and exercises are very important to regain motion and then strength

#### **RETURN TO SPORTS**

- Depends on the type of sport and position
- It may take 6 weeks after surgery before return to sports after meniscectomy (though may be as early as 1 -2 weeks), or 6 9 months after a meniscus repair.
- Full knee motion and strength are necessary before returning to sports

#### **NOTIFY OUR OFFICE IF:**

- You experience pain, numbness, or coldness in the foot
- Any of the following sings of infection occur after surgery: fever, increased pain, swelling, redness, drainage or bleeding in the surgical area.
- New, unexplained symptoms develop. Drugs used in treatment may produce side effects.

Do not eat or drink anything before surgery. Solid food makes general anesthesia more hazardous.

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