MENISCUS TEARS OF THE KNEE

By: Patricia Burkitt, PT

A meniscus tear is a common injury to the knees of the athletic and non-athletic alike. The meniscus is a crescent-shaped piece of rubbery fibro-cartilage that is attached to the top of the tibia (shinbone). Each knee has two: a medial meniscus, on the inner half of the knee, and a lateral meniscus, on the outer half. The end of the femur, or thighbone, is rounded, while the top of the tibia is flatter. Thus the menisci enable the bones to fit together well and provide stability even during movement. They also absorb some shock, and help distribute loads across the joint more easily.

In a young person, a twisting motion with the knee partly flexed, such as in basketball or racquet sports, can cause a tear. In middle-aged to older people, where there is already some wear and tear, it can occur with little or no trauma. Symptoms of a tear can vary. If the injury is traumatic, there will be immediate pain and swelling of the knee, and sometimes difficulty putting weight on that leg. In other cases, onset of pain can be gradual. If the meniscus tears and the loose fragment moves out of place, there can be locking of the knee, or it may give way during some activities.

The outer margins of the menisci have some degree of blood supply, but the inner parts do not. This means that some areas of the meniscus have a potential to heal in the case of a tear, but other areas do not.

Meniscus tears are diagnosed by clinical examination by a physician, often with the assistance of an MRI. There are three basis treatment approaches:

- For small tears, the use of ice, limitation of painful activities (squatting, pivoting, stair climbing) and physical therapy will facilitate a good recovery.

- For larger tears, a menisectomy, or surgical removal of the torn part of the meniscus, is the most common procedure. The surgeon leaves as much of the meniscus as possible. This is followed by the use of ice, elevation, possible use for a brief period of a cane or crutches for comfort, and gradual return to exercise and activity.

- In some selected cases, repair of the meniscus is feasible. The surgeon sews or otherwise repairs the tear. This is usually followed by a period using crutches to take weight off the knee, and limitation of knee bending while healing takes place. While there is always a chance the repair will not be successful and a menisectomy will be needed later, it is often worthwhile to attempt repair in a young, active person if the torn area has the potential to heal.

Physical therapists treat adolescents and adults who fall into all three of these categories. The course of treatment is customized to the individual. It often
includes the use of a cold pack and electrical stimulation to reduce pain and swelling, range of motion exercises to regain full movement and strengthening programs to restore normal strength and conditioning. Balance and agility activities such as balance boards and physioballs fine-tune reflexes. And in the case of athletes, sports-specific drills and plyometrics (jumping skills) get them ready to return to the playing field.

Whether you and your physician opt for a surgical solution or conservative treatment of your meniscus tear, the right rehabilitation will be invaluable for recovering normal function and returning to an active and healthy lifestyle.