
Education

Knee Pain

What causes knee pain?

Knee pain can be caused by a sudden injury, an overuse injury that happens gradually, or from a problem such as arthritis. The knee functions as a hinge and as a shock absorber during walking, running, jumping, kicking, and climbing. Ligaments, tendons, and muscles give the knee stability and hold it together. Because the joint is weak, the knee is at risk for many types of injuries.

The most common knee injuries are sprains, cartilage tears, overuse injuries, and arthritis. A knee sprain is an injury that causes a stretch or tear in a ligament. A ligament is a strong band of tissue connecting one bone to the other. Knee sprains can occur by wrenching or twisting or by a violent blow. Ligaments may tear slightly, or completely pull away from the bone.

Cartilage is a rubbery tissue that cushions your joints. A tear in the knee cartilage can occur from a sudden move or twist when there is weight on the knee. Long-term wear and tear can also break down the cartilage. The cartilage can also break down from arthritis. Cartilage damage causes joint injury and pain.

Overuse injuries such as runner's knee, tendonitis, and iliotibial band syndrome occur from overtraining or overworking you knee. Runner's knee develops when the shock absorbing ability of the knee begins to break down. To prevent this, you need to cut back your activity level. Tendonitis is caused by overused muscle tendons that become irritated and cause pain and swelling. The iliotibial band runs down the outer side of the knee. When it is tight, doing the same motion over and over causes the tendon to rub against the bony area on the outside of the knee, causing irritation and pain.

How are knee injuries treated?

Knee injuries are usually treated by resting the knee. Put a cloth-covered ice pack on the knee for no more than 20 minutes at a time, 4 to 8 times a day. Elevate your knee so it is 12 inches above your heart to help reduce swelling. Wearing an elastic bandage may also reduce swelling. See your health care provider if your knee pain lasts for more than 72 hours. Many injuries can take weeks or months to heal and treatment may include doing physical therapy exercises. If you have torn cartilage or a torn ligament, sometimes surgery is needed.

How can I prevent knee injuries?

To reduce your risk for knee injury, follow these simple tips:

- Warm up before vigorous exercise by walking and stretching the leg muscles.
- Cool down after vigorous exercise by again walking and stretching the leg muscles.
- Strengthen the muscles in the upper thigh and lower leg to give the knee more stability.
- Gradually increase how hard you exercise from week to week. For example, do not double the amount of exercise you do from one week to the next.
- Properly align your knees with your feet while exercising.
- Wear stabilizing shoes with proper arch supports and cushioning.
- Avoid exercising on hard surfaces.
- When cycling, make sure the seat height is correct for the length of your legs.
- Alternate types of exercises. For example, swim or bike instead of run every day.

Sports Medicine Advisor 2006.4; Copyright © 2006 McKesson Corporation and/or one of its subsidiaries. All Rights Reserved. Developed by McKesson Provider Technologies. This content is reviewed periodically and is subject to change as new health information becomes available. The information is intended to inform and educate and is not a replacement for medical evaluation, advice, diagnosis or treatment by a healthcare professional.