

# Knee Pain

**K**nees are complex, weight-bearing joints (junctions between 2 bones) that provide your body with flexibility, support, and a wide range of motion. Knees can be injured from trauma, arthritis, or everyday stress and strain. Knee pain is therefore a common complaint. Depending on the type and severity of joint damage, knee pain can be minor or can lead to severe discomfort and disability. There are a number of common causes for knee pain, and it is important to have an accurate diagnosis of the cause so that appropriate treatment can be undertaken. The April 18, 2007, issue of *JAMA* includes an article that discusses treatment options for individuals who have chronic knee pain.

## RISK FACTORS

- **Obesity**—excess weight increases stress on the knee joints. It increases risk of accelerated **osteoarthritis** (degenerative collapse of the joint).
- **Overuse**—can lead to muscle fatigue and excessive loading stresses across the joint. This causes an **inflammatory response** (increased blood flow and cell response) that damages tissues.
- **Age**
- **Instability**—tight or weak muscles offer less joint support.
- **Mechanical problems**—structural abnormalities, such as having one leg shorter than the other, abnormal alignment of the bones, or flat feet can increase risk of knee problems.
- **Athletic activities**
- **Previous injuries**

## INITIAL CARE GUIDELINES

- **Protection**—a sleeve or brace to provide added joint stability and restrict range of motion
- **Rest**—minor injuries may require only a day or two of rest but severe damage is likely to need a longer recovery time.
- **Ice**—reduces pain and inflammation.
- **Elevation of the limb**
- **Compression**—a wrap around the knee prevents **edema** (fluid buildup within the joint).
- **Medications**—**nonsteroidal anti-inflammatory drugs (NSAIDs)** such as aspirin, naproxen, or ibuprofen can help relieve swelling and pain.

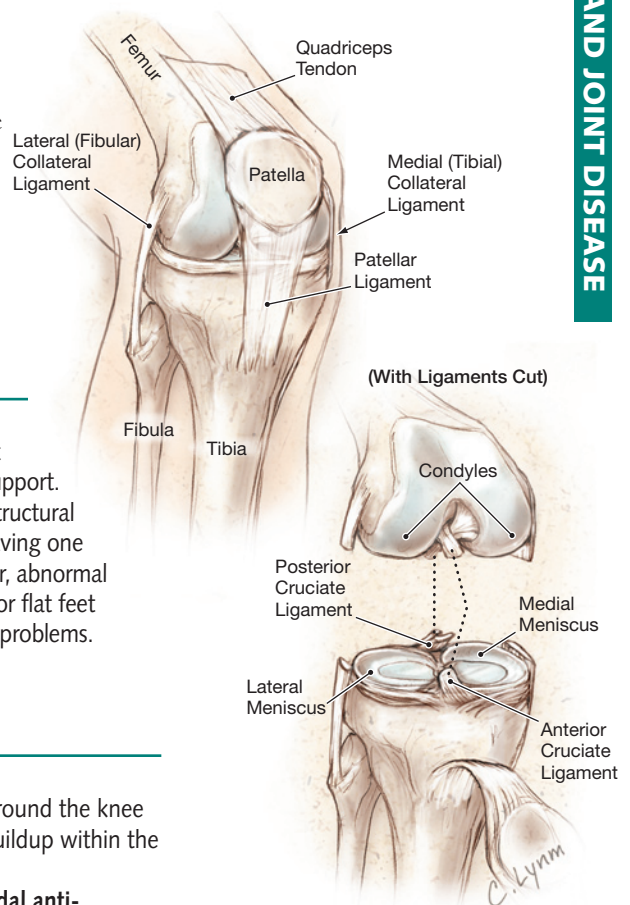
## WHEN TO SEEK MEDICAL ADVICE

- Difficulty bearing weight on the knee
- Swelling of the knee
- Obvious deformity in the leg or knee
- Severe or persisting pain
- **Locking**—inability to bend or straighten the knee joint
- **Infection**—typically indicated by fever and a knee joint that is red, painful, and swollen

## SCREENING AND DIAGNOSIS

Pinpointing the exact reason for knee pain can be challenging because of the wide range of possible causes. Acute injuries may include fractures, ligament and cartilage tears, muscle strains, and **contusions** (blunt trauma). Conditions that generate chronic pain can include arthritis, tumors, and infection. A comprehensive medical history and a thorough physical examination are important. X-rays may be taken to detect bone injury and degenerative arthritis, but computed tomography or magnetic resonance imaging scans are often requested to help identify specific soft tissue injuries.

Anatomy of the Right Knee



## FOR MORE INFORMATION

- American Academy of Orthopaedic Surgeons (AAOS) [www.aaos.com](http://www.aaos.com)
- American Academy of Family Physicians (AAFP) [www.aafp.com](http://www.aafp.com)

## INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA's Web site at [www.jama.com](http://www.jama.com). Many are available in English and Spanish. A Patient Page on osteoarthritis of the knee was published in the February 26, 2003, issue.

Sources: American Academy of Orthopaedic Surgeons, American Academy of Family Physicians

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