The knee is the largest and strongest joint in your body. It is made up of the lower end of the femur (thighbone), the upper end of the tibia (shinbone), and the patella (kneecap). The ends of the three bones where they touch are covered with articular cartilage, a smooth, slippery substance that protects and cushions the bones as you bend and straighten your knee.

**Osteoarthritis**
Osteoarthritis is the most common form of arthritis in the knee. It is a degenerative,"wear-and-tear" type of arthritis that occurs most often in people 50 years of age and older, but may occur in younger people, too. In osteoarthritis, the cartilage in the knee joint gradually wears away. As the cartilage wears away, it becomes frayed and rough, and the protective space between the bones decreases. This can result in bone rubbing on bone, and produce painful bone spurs.
Symptoms

A knee joint affected by arthritis may be painful and inflamed. Generally, the pain develops gradually over time, although sudden onset is also possible. There are other symptoms, as well:

- The joint may become stiff and swollen, making it difficult to bend and straighten the knee.
- Pain and swelling may be worse in the morning, or after sitting or resting.
- Vigorous activity may cause pain to flare up.
- Loose fragments of cartilage and other tissue can interfere with the smooth motion of joints. The knee may "lock" or "stick" during movement. It may creak, click, snap or make a grinding noise (crepitus).
- Pain may cause a feeling of weakness or buckling in the knee.
- Many people with arthritis note increased joint pain with rainy weather.

Doctor Examination

During your appointment, we will talk with you about your symptoms and medical history, conduct a physical examination, and likely order x-rays.

- **X-rays.** These imaging tests create detailed pictures of dense structures, like bone. X-rays of an arthritic knee may show a narrowing of the joint space, changes in the bone and the formation of bone spurs (osteophytes).
Treatment

Although there is no cure for osteoarthritis, there are a number of treatment options that will help relieve pain and improve mobility.

As with other arthritic conditions, early treatment of osteoarthritis of the knee is nonsurgical. We may recommend a range of treatment options, such as lifestyle modifications, physical therapy, medications or injections. When this non surgical treatment does not work anymore, then it may be time to consider a total or partial knee replacement. Joint replacement surgery is a safe and effective procedure to relieve pain,
correct leg deformity, and help you resume normal activities.