Osteoarthritis is a degenerative disorder that primarily affects the large weight bearing joints-- the hips, knees, and spine. The hands are also often affected, particularly in women.

In osteoarthritis, the smooth cartilage that covers the ends of bones becomes roughened and eventually is worn away. As the cartilage deteriorates, the ends of the bones thicken and bony spurs are formed. Without the cushion of cartilage, the irregular surfaces of bones grate against each other, a sensation called crepitus, and movement is painful. As the disease progresses, fluid-filled sacs may form in the bone near the joint. Broken off fragments of cartilage and bone may irritate the joint space.

Who gets osteoarthritis?
Osteoarthritis is the most common joint disease diagnosed, affecting both men and women. While it found most frequently in people over age 65, it is not considered a natural process of aging or a consequence of wear and tear.

Doctors believe there are many factors that may influence the development of osteoarthritis. Heredity may be important and obesity is an obvious factor. Occupational overuse of joints and sports-related stress on joints also might be contributors.

What are the symptoms of osteoarthritis?
In the early stages of the disease, there may be no symptoms to warn of changes in the joints because there are no nerve fibers in the cartilage. The disease develops so gradually that it is well established before it becomes apparent.

When they do occur, initial symptoms may be mild aching and soreness. As the disease progresses, symptoms include stiffness and pain occurring in one or a few joints. The pain may be sharp on movement and throbbing while at rest or may be constant and severe.

Degenerative joint disease affecting the hands often causes bony enlargements of the affected joints of the fingers and base of the thumb. These bony knobs are called nodes or nodules.

How is osteoarthritis diagnosed?
Osteoarthritis can be distinguished from other forms of arthritis based on the patient's age, evaluation of symptoms, physical examination of the joints, and x-rays showing joint changes that are typical of osteoarthritis. Computer tomography (CT scan) and magnetic resonance imaging (MRI) may be useful to rule out other problems. While swelling, warmth, and redness are usually characteristic of rheumatoid arthritis, these symptoms do sometimes occur in osteoarthritis if the joint becomes inflamed by...
loose cartilage and bony fragments. Sampling of the joint fluid by needle aspiration and blood tests aid in making a proper diagnosis.

**How is osteoarthritis treated?**
Osteoarthritis is a chronic disorder for which there is no known cure. However, a number of effective drugs can bring relief. The treatment plan usually includes a combination of drug therapy and a balanced program of rest and moderate exercise.

The goals of exercise are to maintain function by preserving range of motion and improving muscle strength. Short periods of rest throughout the day are effective in relieving stress on damaged joints.

**SELF HELP**
- Follow your doctor or therapist's advice in performing exercises to keep joints flexible and improve muscle strength.
- Take short periods of rest throughout the day to relieve stress on damaged joints.
- Applications of heat using an electric pad or hot pack can help to relax muscles around a painful joint. Some people find cold packs helpful.
- Follow your doctor's advice, and always take medication exactly as prescribed.

If you have questions you should call your physician or registered nurse.