

EXERCISE RX

Exercises for Chronic Osteoarthritis of the Hand

Osteoarthritis is the least severe form of arthritis, but it is the most common. In contrast to rheumatoid arthritis, which is a systemic and often chronic condition, osteoarthritis is directly related to activity and age, and it attacks only the joints.

Osteoarthritis may be triggered by many factors that traumatize a joint, but the most common cause is simply the natural wearing away of cartilage in weight-bearing joints that occurs with use over time.

In response to the erosion of cartilage, the body's defense mechanism is to order the growth of new bone. The patches of rough bone, which may

become bone spurs, can impede the natural motion of the joint and cause pain.

In addition, a joint affected by osteoarthritis is highly susceptible to flare-ups because the cartilage, having become rough and uneven from the osteoarthritis, is a source of friction for other structures that come into contact with it.

Some patients assume that clicking and cracking noises in the joints mean that they have osteoarthritis. Although such clicking and cracking may be caused by osteoarthritis, it may also be caused by—and is generally aggravated by—tight muscles and tendons, which highlights the impor-

tance of maintaining muscle flexibility.

Patients with osteoarthritis often report general good health, except for a particular painful spot. The site of pain is often a large, weight-bearing joint such as the hip or knee, but osteoarthritis can occur in any joint, including those of the feet and hands. The hands—particularly the joints of the fingers—are often affected. About 60% of adults suffer from some osteoarthritic changes in the hands between the ages of 50 and 75 years. The problem usually affects the tips of the fingers—especially the distal interphalangeal joints—and pain may increase when the hands are cold.

Patients suffering from osteoarthritis may notice nodules alongside the finger joints, near the fingertips, or they might find that their hands are stiff first thing in the morning.

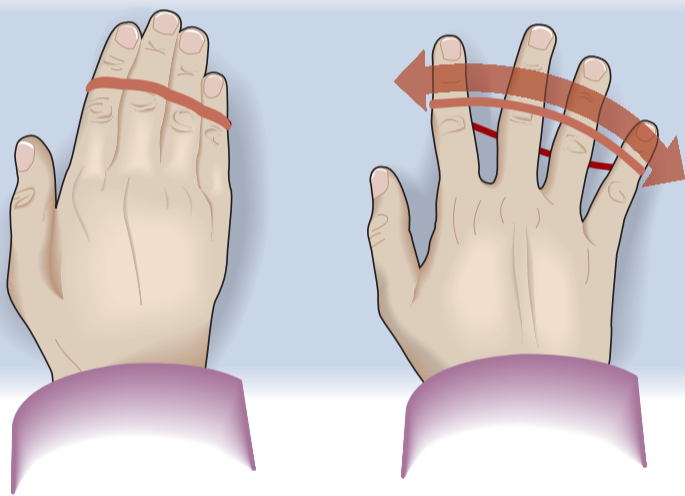
Although surgery may be required in extreme cases, most patients can relieve their pain by soaking their hands in warm water for a few minutes when they wake up and by doing daily hand exercises. In addition, patients who suffer from stiffness in their thumbs can rotate the thumb in the largest possible circles in order to improve mobility and maintain the web space between the thumb and first finger. These strategies will help delay disability and maintain function. ■

Next month: Exercises for patients with acute lumbago.

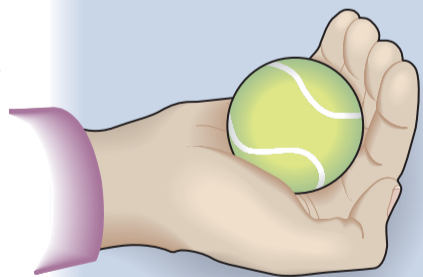
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Osteoarthritis of the Hand

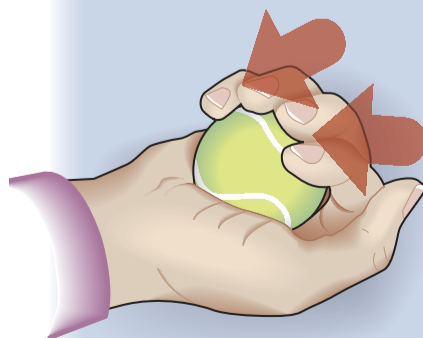


▲ **Hand-muscle stretch.** Wrap a wide rubber band around your fingers. Spread the fingers apart. Hold for 5 seconds. Relax. Repeat 8 times, working up to 12 times as able. This exercise should not be done when you have an acute flare-up of osteoarthritis in your hand.



▶ **Tennis ball squeeze.** Hold a tennis ball in your hand. Squeeze it with a steady pressure, holding as you count to 4 or 5, and release as you count to 2. Relax. Repeat 4-5 times.

The reason for the controlled release is to allow blood to move back into the hand, which is a slower process as we age. This exercise can be done even if there is some swelling in your hands.



▶ **Thumb-muscle strengthener.** Rotate your hands so the thumbs are facing each other upside-down. Press the thumb of one hand against the thumb of the other hand. Hold for 5 seconds. Relax. Repeat 8-10 times daily to maintain the strength of the thumb muscles. This exercise can be done even if you have some swelling in your hands.

▶ **Web-space strengthener.**

Place both hands together in a steeple shape—thumb to thumb and fingertips to fingertips. Try to press the palms together. You should feel a stretch in the web space between the thumb and index finger, and between the other fingers. Hold for 5 seconds. Relax. Repeat 5-6 times. This exercise can be done even when you have some swelling in your hands.

