

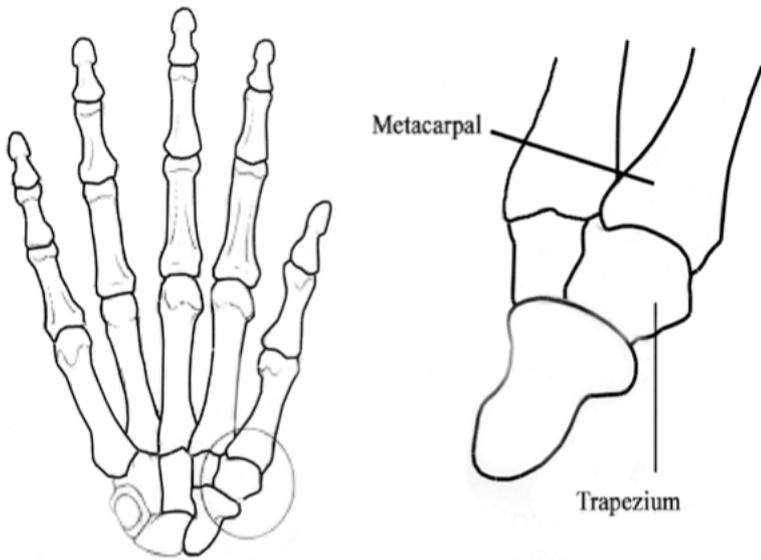
ARTHRITIS OF THE BASE OF THE THUMB

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WHAT IS ARTHRITIS OF THE BASE OF THE THUMB?

Any condition that irritates or destroys a joint is referred to as arthritis. Over a 100 different types of arthritis afflict the human body. The most common form is osteoarthritis, otherwise known as degenerative joint disease because it occurs as we age. It also has a tendency to run in families.

In a normal joint, cartilage covers the ends of articulating bones and permits their smooth, painless movement against one another. In osteoarthritis, the cartilage layer wears out, permitting bone to make contact against bone. As this process proceeds to destroy the joint, the signs and symptoms of arthritis develop.



The joint at the base of the thumb is called the first carpometacarpal joint. A wrist bone called the trapezium and the first metacarpal bone form this joint. The unique shape of these bones permit the thumb to move in and out of the plane of the palm as well as bend across the palm to oppose to the other fingers. Arthritis involving the base of the thumb is far more common in women than men, and typically occurs after the age of 40.

WHAT ARE THE SIGNS AND SYMPTOMS?

The earliest symptom of base of thumb arthritis is pain with activities that involve pinch. These include opening jars, doorknobs, car doors and turning keys. Prolonged or heavy use of the thumb may produce an aching discomfort at the base of the thumb. Changes in the weather may produce similar symptoms. As the disease progresses, less stress is required to produce the pain. Pinch strength diminishes. Activity-related swelling may develop. Later, any motion of the thumb, even without stress, may become painful. Eventually the joint begins to appear enlarged and out of place.

HOW IS THE DIAGNOSIS MADE?

A careful history will frequently alert the doctor to suspect base of thumb arthritis. Inspection of the thumb will sometimes reveal a tender prominence at the base of the thumb that represents either inflammation of the joint or displacement of the thumb metacarpal. As a diagnostic test, your doctor may press the thumb metacarpal firmly against the trapezium and move the joint. This "grind" test will usually reproduce the symptoms of pain, and may produce a gritty sensation called "crepitus". This represents bone contact against bone, which also may show up on x-ray.

HOW IS BASE OF THUMB ARTHRITIS TREATED?

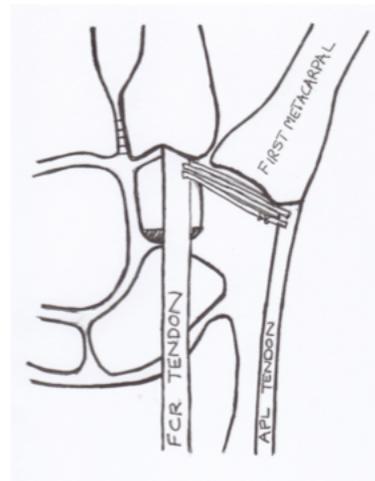
Symptoms of base of thumb arthritis may respond well to a combination of

1. A lightweight splint
2. Short (7 day) courses of anti-inflammatories when symptoms flare up
3. Modifying activities to minimize irritating the joint.

Steroid injections into the joint are rarely recommended as they give only temporary relief.

A hand therapist who fits your splint can also advise of various useful devices to assist with opening jars and other activities of daily living. The aim of conservative treatment is to teach you how to manage your arthritis so that it does not interfere with your lifestyle.

When non-operative treatment does not provide benefit, surgery may be advised. Active people in the 50-65 year age group are more likely to require surgery. Older people with lower demands often manage well with conservative treatment.



WHAT DOES SURGERY INVOLVE?

The goal of surgery is to decrease pain and preserve motion in the thumb. The procedure involves removing the trapezium bone and using a wire suture material to stabilise the base of the metacarpal bone. It is performed under general anaesthetic and takes 1-1.5 hours. You will stay in hospital overnight for pain relief.

Following the surgery, the hand is immobilised in a bulky dressing with a fibreglass splint to protect the thumb. The fingers are usually left free for light activities. The dressing is removed at 10-14 days and a lightweight plastic splint made. A therapy programme is commenced four weeks following surgery when the splint is shortened to include the wrist and thumb only. The splint shall be used between exercises for 8-12 weeks.

RECOVERY

Discomfort and weakness are expected with early therapy and improve with time. No strong grasp or pinch shall be allowed for 12 weeks. Unrestricted use of the thumb is usually permitted after 12 weeks. Up to one year may be required before the maximum benefits of surgery are achieved. Pain relief is very good following this operation but you may still have some occasional mild discomfort. Strength is also usually improved following surgery.