

Preparing for and Recovering From Thumb “Suspensionplasty”

Thank you for choosing Palm Beach Hand to Shoulder for your upper extremity care. I have put this information together with the patient scheduled for surgery to treat thumb arthritis in mind. Please review carefully to ensure the best possible outcome.

What is thumb basal joint (CMC) arthritis?

Arthritis at the base of the thumb is one of the most common degenerative conditions of the hand and wrist. The joint at the base of the thumb is called the carpometacarpal (CMC) joint. It is responsible for the thumb's position away from the rest of the hand. Its double saddle shape is what permits us to move our thumb in multiple planes, allowing us to hold items such as a pen or eating utensil, open jars or doors, or manipulate fine objects. Owing to its great freedom of mobility, the cartilage in the joint can commonly wear out and lead to symptoms. It is theorized that women are more commonly afflicted than men because the soft tissues around the joint are not as supportive.

What are the symptoms of thumb basal joint arthritis?

Symptoms of arthritis at the base of the thumb include pain, swelling, deformity, stiffness, loss of strength, and difficulty with everyday tasks such as writing, typing, twisting open tight lids or jars, using scissors or pliers, and squeezing or pinching items between the thumb and the other digits (getting toothpaste out of tube, hanging up a pair of pants).

What does surgery to treat thumb basal joint arthritis involve?

If your symptoms have not responded to bracing, steroid injections, oral anti-inflammatories, or diet and activity modifications, you may be a candidate for surgical treatment.

The most reliable and successful surgical option for thumb basal joint arthritis has been given several names, the most common being “suspensionplasty” or LRTI (ligament reconstruction and tendon interposition). This is an outpatient procedure performed with light general anesthesia and regional anesthesia, also referred to as a “block”, which temporarily numbs the arm to allow for painless surgery. The block also reduces and delays the need to take narcotic medication, thereby reducing the risk of unpleasant side effects of narcotics, including nausea, constipation, and cognitive impairment.

The surgery involves removing a small arthritic bone at the base of your thumb called the trapezium. This is performed through a 3 cm incision on the back of the thumb. I then use a tendon from your forearm (taken through a small incision) to reconstruct the supporting ligaments at the base of the thumb and to serve as a cushion in lieu of the removed bone. The procedure is often referred to as a suspensionplasty because the thumb looks suspended on the x-ray after surgery (the interposed tendon does not show up on x-ray so the thumb looks like it's floating).

It takes about one hour to perform the surgery. You can expect to be at the surgery center for 3-4 hours (so your transportation can plan accordingly).

What can I expect after surgery?

When you wake up from surgery, you will have a splint that spans your wrist. The end of your thumb will be free but the surgical site at the base will be covered. You will also have a sling to support the arm until you regain control of it as the block wears off, which occurs anywhere for 6 to 24 hours after the surgery. You may stop using the sling as soon as you recover control and feeling of your arm.

The “rebound pain” that occurs as the effects of the block wear off can catch one off guard, so best to take a prescribed pain pill as you feel the tingling and return of sensation that signals the end of the block. This pain is strong but only lasts a few hours. Most patients do not require the narcotic medication beyond 72 hours from surgery. Barring any medical contraindication such as heart or kidney disease or gastritis, it is permissible to take over the counter ibuprofen or naproxen as an augment to the pain medication. Do not take Tylenol at the same time as the pain medication, as the prescribed pain medication already contains Tylenol.

You should keep your operative arm elevated as much as possible for the first 72 hours after surgery. This will help with post-surgical swelling. It is also recommended that you ice down the hand for 20-30 minutes at a time several times throughout the course of the first 72 hours to help with pain and swelling. If you feel as though the ice effect does not reach through the bandage, placing an ice bag in the underarm will achieve a similar effect. You will be encouraged to wiggle the exposed part of the thumb and alternate between making a fist and straightening out your other fingers to help with swelling and avoid stiffness. You should not lift anything or do anything forceful with the operated hand until cleared to do so.

Will I need therapy?

Yes. The majority of patients undergoing thumb suspensionplasty will have therapy for approximately 8-10 weeks beginning 2 weeks after the surgery. I may recommend a preoperative evaluation with your treating hand therapist. Two weeks after the procedure, the hand therapist will remove the surgical bandage and sutures and instruct you on light exercises, scar management, and further reduction of swelling. They will also review activity restrictions. You will then wear a low profile neoprene sleeve for one month. The sleeve should only be removed for hygiene, home exercises, and therapy visits. At 6 weeks from the time of surgery, you will start “weaning” the supportive sleeve, and the emphasis will switch to more conditioning of the hand for dexterity, coordination, and strength.

When can I return to work?

Patients with sedentary jobs may be able to return as early as one week after surgery. Typing will have to be performed with modification. Patients who perform repetitive tasks with their thumb (e.g. cashier, bank teller) will need closer to 6 weeks off from work, and patients who have to forcefully load the thumb in their jobs (e.g. nurses, dentists, construction workers) will need closer to 12 weeks off from work.

When can I resume athletics?

Although there is a lot of variability, most patients can comfortably resume athletics at 12 weeks from the time of surgery. Although the incision can get wet in the shower after the sutures are removed, I recommend avoiding immersing it in ocean, lake, or pool/hot tub water for a full month from the procedure.

When will I recover full function of the thumb?

Although you will be permitted full use of the thumb at 3 months after the surgery, it takes a **full year** before you will see the final results in terms of recovery of strength and dexterity in the thumb. The reason for this is that the thumb is a highly specialized body part, and it takes that long for the brain cortex to be retrained to use the thumb for highly skilled function and for tasks that require a lot of strength when loading the thumb.