

Basilar Thumb Joint Arthritis Surgery: What You Need to Know

Basilar thumb joint arthritis, or arthritis of the carpometacarpal (CMC) joint, occurs when the cartilage at the base of the thumb wears away, causing pain, stiffness, and weakness. This condition often develops due to aging, repetitive use, or injury. When non-surgical treatments like splinting, medications, or injections no longer relieve symptoms, surgery may be recommended. Basilar thumb joint arthroplasty—commonly performed as a trapeziectomy with suspension arthroplasty—removes the damaged bone and stabilizes the thumb to reduce pain and restore function. Below, we explain the surgery, recovery, potential complications, and expected outcomes to help you feel prepared.

Description of the Surgery

Basilar thumb arthritis surgery focuses on the CMC joint, where the trapezium bone (a small wrist bone) meets the thumb's metacarpal bone. The most common procedure is a **trapeziectomy with suspension arthroplasty**, described here:

- The surgeon numbs the area with local or regional anesthesia (numbing the wrist or arm) and sedation is administered, though general anesthesia (putting you to sleep) may be used depending on your case.
- A small incision (about 1 inch) is made near the base of the thumb.
- The trapezium bone, which forms part of the arthritic joint, is carefully removed to eliminate the painful bone-on-bone contact.
- To prevent the thumb from collapsing into the empty space, the surgeon creates a “suspension” using a strong braided suture along the base of the metacarpal (although in some cases a portion of a wrist tendon or suture anchors might be used for the reconstruction). This stabilizes the thumb and maintains its position.
- The incision is closed with stitches, and a splint is applied to protect the area during early healing.
- The procedure typically takes less than 1 hour and is outpatient, meaning you can go home the same day.



In some cases, additional techniques (like joint replacement with an implant) may be considered, but trapeziectomy with suspension is the most widely used and reliable method.

Source:
radiopaedia.org

What to Expect During Recovery

Recovery from basilar thumb arthritis surgery takes time as the thumb adjusts to its new structure. Here's what to expect:

- **Immediately After Surgery:**
Your thumb and wrist will be immobilized in a splint. Mild to moderate pain, swelling, or bruising is normal, manageable with prescribed pain medication or over-the-counter options like ibuprofen. Keep your hand elevated to reduce swelling. You should also work on moving the unaffected fingers (from a tight fist to complete extension) to avoid stiffness.

- **First 1-2 Weeks:**

The protective splint is removed when you start occupational therapy – at which point your hand therapist will provide you with a removable brace and coach you through a progression of exercises to regain motion. Stitches are typically removed within 10-14 days. You'll need to avoid using the thumb for gripping or pinching during this time.

- **Weeks 3-8:**

Gentle thumb exercises are continued under guidance of your hand therapist to help restore motion and prevent stiffness. Light daily activities are possible while using the removable brace.

- **Months 2-3:**

Strength and function gradually improve with therapy, as you wean from your brace and progress through the program. You may start using your thumb for everyday tasks, though heavy gripping or lifting should be avoided until cleared by your surgeon at around 12 weeks after surgery.

- **Full Recovery:**

Complete healing and maximum strength can take at least 6 months, and up to a year in some cases. Most patients notice significant improvement by 3-6 months, with ongoing gains as the thumb adapts.

Follow your surgeon's instructions on immobilization, therapy, and activity restrictions for the best outcome.

Potential Complications

This surgery is generally safe and effective, but like any procedure, it carries some risks. These are rare and often manageable:

- **Infection:** Redness, swelling, or drainage at the incision site may indicate an infection, treatable with antibiotics.
- **Nerve Injury:** Rarely, nearby nerves may be irritated, causing temporary numbness or tingling in the thumb or wrist. Permanent injury is very rare.
- **Construct Failure:** The material or tendon used for suspension could weaken or stretch, potentially affecting thumb stability or function, though this is uncommon.
- **Persistent Pain or Weakness:** Some patients experience mild residual discomfort or reduced grip strength, often improving with time or therapy. A minority of patients have developed chronic instability or hyperextension at the next joint of the thumb (the metacarpophalangeal joint or MCP joint) – in these cases, your surgeon may recommend a stabilization or fusion of the MCP joint to lessen the risk of this issue after basilar thumb joint arthritis surgery.
- **Complex Regional Pain Syndrome (CRPS):** A rare condition causing chronic pain and swelling, which requires specialized treatment.

Contact your doctor if you notice severe pain, signs of infection, or unexpected changes after surgery.

Expected Outcomes

Basilar thumb joint arthritis surgery has a high success rate, offering significant relief for most patients. Here's what you can expect:

- **Pain Relief:** Most patients experience a significant reduction in thumb pain, especially during activities like pinching or grasping, within weeks to months.
- **Improved Function:** While full grip or pinch strength may not quite return to pre-arthritis levels, the thumb becomes more usable for daily tasks like opening jars, turning keys, or writing.
- **Long-Term Results:** Approximately 80-90% of patients report lasting satisfaction with the procedure. The removal of the trapezium eliminates the arthritic joint, preventing pain from recurring in that area.

Outcomes depend on factors like the severity of arthritis, your commitment to therapy, and how well you protect the thumb during recovery.

Final Notes

Basilar thumb joint arthritis surgery is a proven solution to relieve pain and restore thumb function. If you have questions about the procedure or your specific case, feel free to discuss them with your surgeon. We're here to support you every step of the way!