

Hand Arthritis Surgery: What You Need to Know

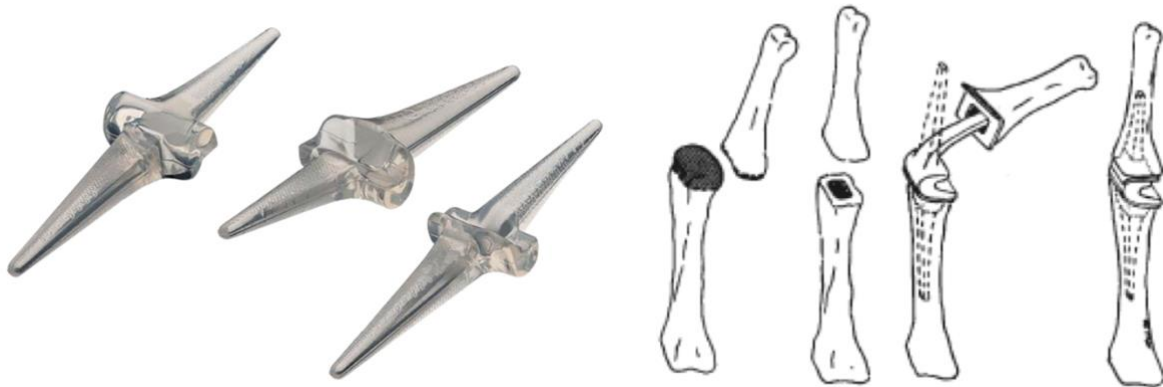
Hand arthritis occurs when the cartilage in the finger joints wears away, causing pain, stiffness, and swelling. This can affect the metacarpophalangeal (MCP) joints (where the fingers meet the hand), proximal interphalangeal (PIP) joints (middle finger joints), or distal interphalangeal (DIP) joints (fingertip joints). When non-surgical treatments like medications, splints, or injections no longer help, surgery may be recommended. The most common procedures are **arthroplasty** (joint replacement) or **fusion** (joint immobilization) for the MCP and PIP joints, and **fusion** for the DIP joints. Below, we explain the surgery, recovery, potential complications, and expected outcomes to help you feel informed.

Description of the Surgery

Hand arthritis surgery varies depending on the affected joint and your needs. Here's how the most common procedures are performed:

- **Arthroplasty of the MCP or PIP Joints (Joint Replacement):**

This procedure replaces a damaged joint with an artificial implant to relieve pain while preserving some motion. The surgeon makes a small incision (1-2 inches) over the affected joint, removes the arthritic bone ends, and inserts a silicone, pyrocarbon, or metal/plastic implant to act as a new joint surface. The incision is closed with stitches, and a splint is applied. This is often chosen for MCP joints to maintain flexibility for gripping.



Source: stryker.com

- **Fusion of the MCP or PIP Joints (Arthrodesis):**

Fusion permanently locks the joint in a fixed position to eliminate pain. The surgeon makes an incision over the joint, removes the damaged cartilage, and aligns the bones in a functional position (e.g., slightly bent for grasping). Pins, screws, or a small plate are used to hold the bones together until they fuse naturally. The incision is closed, and a splint is applied. This may be preferred for severe arthritis or instability, or for certain digits that rely on pinch strength (such as the thumb or index finger).

- **Fusion of the DIP Joints (Arthrodesis):**

For the fingertip joints, fusion is the most common approach. The surgeon makes a small incision (about ½ inch) over the DIP joint, removes the arthritic cartilage, and fixes the bones in a straight or slightly bent position using a headless screw or pins. The incision is closed, and a splint protects the area. This eliminates pain while sacrificing motion at the fingertip.



Source: acumed.net

These surgeries are typically performed under local anesthesia (numbing the hand) with sedation or general anesthesia, depending on the extent of the procedure. They often take 1 hour or less, and are typically outpatient, meaning you can go home the same day.

What to Expect During Recovery

Recovery depends on the procedure and joint involved, but all require immobilization and gradual rehabilitation. Here's a general timeline:

- **Immediately After Surgery:**

Your hand will be placed in a splint to protect the joint(s). Mild pain, swelling, or stiffness is normal, manageable with prescribed pain medication or over-the-counter options like ibuprofen. Keep your hand elevated to reduce swelling.

- **First 1-2 Weeks:**

The splint remains in place, and stitches are typically removed within 10-14 days. You'll need to avoid using the affected finger(s) during this time. Gentle movement of uninvolved fingers is encouraged to prevent stiffness.

- **Weeks 3-6:**

For fusion, the splint or cast may stay on for 4-8 weeks until the bones begin to fuse. For arthroplasty, a removable splint or buddy straps may be used after 2 weeks, and occupational or physical therapy often starts at this time to restore motion and strength. Light activities like writing or typing may be possible with care.

- **Months 2-3:**

Fusion patients transition to normal use as the joint unites together (full fusion can take 8-12 weeks). Arthroplasty patients continue therapy to improve flexibility and grip strength, gradually resuming daily tasks and normal use.

- **Full Recovery:**

Complete healing takes 3-6 months. Arthroplasty patients may regain functional motion, while fusion patients adapt to a stable, pain-free but fixed joint.

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

Potential Complications

These surgeries are generally safe, but risks exist, as with any procedure. These are rare and often treatable:

- **Infection:** Redness, swelling, or drainage at the incision site may indicate an infection, treatable with antibiotics.
- **Nerve or Tendon Damage:** Rarely, nearby structures may be irritated, causing numbness or weakness, which may improve over time. Permanent injury is very rare.
- **Implant Issues (Arthroplasty):** The artificial joint may wear out or loosen over years, potentially requiring revision surgery.
- **Nonunion (Fusion):** The bones may fail to fuse, necessitating additional treatment.
- **Stiffness:** Even with arthroplasty, some stiffness may persist (particularly in joints that were very stiff before surgery), though therapy can help.

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

Expected Outcomes

Hand arthritis surgery effectively relieves pain and improves hand function, with outcomes varying by procedure:

- **Pain Relief:** Most patients experience significant or complete pain reduction in the treated joint(s) within weeks to months.
- **Functionality:**
 - **Arthroplasty:** Preserves some motion, allowing better grasping or pinching, though strength may not fully return to pre-arthritis levels. Ideal for MCP or PIP joints.
 - **Fusion:** Eliminates motion in the fused joint but provides a stable, pain-free finger for daily use. Common for DIP joints and certain PIP joints.
- **Long-Term Results:** Over 85-90% of patients report satisfaction with pain relief and function. Arthroplasty implants may last 10-15 years or more, while fusion typically offers a permanent solution.

Success depends on the severity of arthritis, the chosen procedure, and your adherence to recovery guidelines.

Final Notes

Hand arthritis surgery can restore comfort and usability to your fingers. If you have questions about which option is right for you or what to expect, discuss them with your surgeon. We're here to support you every step of the way!