Trigger Finger
Stenosing tenosynovitis, also known as “trigger finger”, involves the pulleys and tendons in the hand that bend the fingers. The tendons act like long ropes connecting the muscles of the forearm to the bones of the fingers and thumb. In the finger, there are five pulleys or tunnels through which the tendon must pass in order to bend all of the finger joints. These pulleys hold the tendons close against the bone, giving a mechanical advantage to the tendon. This ultimately results in a stronger grip.

Trigger finger/thumb occurs when the pulley at the base of the finger thickens and constricts the tendon, making it hard for the tendon to glide freely through the tunnel. Sometimes the tendon develops a nodule (knot) or swells. This inflammation causes pain in the palm of the hand which may travel up to the second finger joint. Other common symptoms include popping or a catching sensation. If the problem persists, sometimes the finger gets stuck in a bent position. Patients may complain of having to pry open their finger using their other hand.

There are many causes for trigger finger; some may apply to patients and others may not. It is more common in people whose occupation involves heavy lifting or forceful grasping. People with medical conditions such as diabetes, thyroid disease, gout, Dupuytren's disease and rheumatoid arthritis are also more prone to developing trigger fingers.

Prior to surgery, non-operative measures may be attempted to alleviate the symptoms of trigger finger. Splinting the finger can be performed if the finger only triggers occasionally or only during a certain part of the day. Corticosteroid injections are often used for moderate conditions in order to decrease the inflammation in the area and allow the tendon to glide freely again. If these measures are unsuccessful, surgery may be performed and is usually curative in over 90% of patients.

Explanation of Procedure
Surgery for trigger finger is an outpatient procedure and can be performed under a local anesthetic. A small incision (usually about half an inch) is made over the palm of the hand. The pulley is directly visualized and released allowing the tendon to glide freely. The incision is closed with two to three sutures, and the patient is encouraged to begin active motion of the finger immediately. The locking and catching symptoms should resolve immediately following surgery.

Preparing for Surgery
Once you decide to have surgery, the physician and his staff will schedule the procedure at the local hospital or surgery center. Blood tests and other diagnostic exams are usually obtained to make sure the patient is safe for surgery. If you have multiple or severe medical conditions you may see your primary care doctor for a physical exam prior to surgery. You are instructed to have nothing to eat after midnight the day before their surgery. All blood thinning medications, including anti-inflammatories such as ibuprofen and aspirin, should be stopped 7 days prior to surgery. In addition, certain medications for rheumatoid arthritis may need to be stopped as well. Your surgeon will go over your medication list and let you know which medications will need to be stopped.

What to Expect at Surgery
Expect to arrive at the hospital or surgery center at least 1-2 hours prior to your actual surgery time. This gives the staff time to meet you, get all your paperwork in order, and make sure you are safe and ready for surgery. You will meet many different people on the day of surgery. A preoperative nurse will get you dressed and ready for surgery. The anesthesiologist will discuss the different options available to help you sleep comfortably and pain-free during the actual surgery. The circulating nurse and scrub tech assist the surgeon during the procedure. Finally, the postoperative
nurse will help you recover from the anesthesia after the surgery. Depending on the type of anesthesia, you receive, you may be in the postoperative care area from anywhere from a half hour to three hours after your procedure. A friend or relative will need to drive you home after you are released from the postoperative care unit.

**Care After Surgery**

You will be instructed to keep the dressing clean and dry. Patients are able to shower by placing a plastic bag over the dressing. The dressing may be removed on day 2 and begin cleaning with soap and water. A band aid should be used to protect the wound. At your first postoperative visit, the sutures will be removed. Instructions for home therapy exercises or a prescription for hand therapy will be given. You will be allowed to start using your hand and fingers as tolerated, refraining from heavy lifting until 4 weeks after surgery. Usually, after about 4 weeks after surgery, most patients are able to return their normal activities with minimal discomfort in their hand.

**Possible Complications**

1. Incomplete resolution of preoperative stiffness of the finger. This is usually caused by persistent tightness of the ligaments in the finger. This is usually seen in longstanding trigger fingers. Hand therapy may be able to help to stretch out these ligaments over time.
2. Infection is usually rare for this procedure but can occur. Common signs of infection include increasing pain after surgery, increased redness around the incision, swelling, and drainage. Patients may have fever or chills as well. If you experience any of these symptoms, contact your surgeon immediately. If you are unable to see your doctor, go to the emergency room.
3. Persistent triggering may be caused by incomplete release of the pulley.
4. Bowstringing (tendon becomes prominent against the skin during flexion of the finger) is caused by excessive release of the tendon sheath.

**Questions**

The CORE Institute is dedicated to your outcome. If any questions or concerns arise, please call The CORE Institute at 1.866.974.2673.