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The Trigger Release Procedure

We all have tendons that bend and move our fingers. These tendons connect the muscles in the forearm to the tips of the fingers. In the finger, the tendons are held against our bones by sliding though a series of small rings or pulleys, much like a belt is held in place by belt loops.

Trigger Finger is a condition caused when one of the tendons in your finger or thumb gets caught, or stuck, as it tries to slide through one of the rings that hold it in place. The tendon can become swollen, and not quite fit through the ring. Think of a shoelace that has a knot in it, and has a hard time passing though the grommet of your sneaker. Symptoms range from pain, stiffness, and clicking, to frank locking of the digit (usually with the finger locked down into the palm). Sometimes, a patient even needs the other hand to 'unlock' it. While not dangerous, it is both annoying and uncomfortable. Sometimes it resolves on it's own, but when it doesn't treatment is needed.

Many surgeons still use cortisone injections to reduce the inflammation and swelling. While safe, and sometime effective, they are often quite painful, and frequently temporary or ineffective. When injections fail, many surgeons will perform an open tendon sheath incision, or trigger finger release. This is a reliable outpatient procedure, where the surgeon makes a small incision, and cuts the ring or pulley, opening it up, and allowing the tendon to slide without restriction. Since there are many other rings, the finger works just fine, and the ring eventually heals, although with a larger diameter than before.

While an open tendon sheath incision is a safe and successful surgery, it has drawbacks; it is usually done in an outpatient surgical setting, and there is a bandage, and stitches, that must be kept clean and dry.

For many years, we have been performing a different procedure, a percutaneous (that means through the skin) tendon sheath incision. This in-office procedure does the same thing as the open surgery (i.e. we cut the little ring squeezing the tendon, so the tendon can slide smoothly), but it is done with local anesthesia, using a small needle under ultrasound guidance, and typically takes under 30 seconds. After the procedure, the patient gets a Band-Aid. It is common to have mild to moderate discomfort after the procedure for a few days. Over the counter Tylenol, Ibuprofen and ice can help reduce the pain. You may resume activities as tolerated.

The procedure appears quite safe; in over a thousand cases, we have had no infections, or any cut nerves, arteries, or tendons, (although no procedure can be guaranteed 100% safe). There is about a 90% 'cure' rate; that means that 9 out of 10 patients are permanently cured, and need no follow up. About 10% of patients may have ongoing pain or triggering, which usually resolves, but occasionally an open procedure is necessary.