Advantages of the Guo Technique: Thread Carpal Tunnel Release (TCTR)

There are many advantages of TCTR.
- Ultra-minimally invasive, no scalpel and no incisions
- Minimal pain
- Minimal downtime
- No general anesthesia
- Performed in-office, with local anesthetic
- Minimal rehabilitation

Patients undergoing TCTR are generally able to return to their normal activities of daily living that day and return to work quickly depending on their job.

The Guo Technique for carpal tunnel syndrome release was developed by Drs. Danzhu Guo and Danqing Guo, both BayCare Clinic Pain & Rehab Medicine physicians.

The Guo Technique
for treating carpal tunnel syndrome

Ultra-minimally invasive procedure: thread carpal tunnel release
What is carpal tunnel syndrome?

Carpal tunnel syndrome (CTS) occurs when the median nerve is compressed in the carpal tunnel, resulting in pain, numbness and restricted movement in the hand and fingers. It affects a variety of people, often those who work with their hands in repetitive motions.

Other risk factors for CTS include past fractures and injuries, diabetes and rheumatoid arthritis. The disorder affects millions of people worldwide and if left untreated, muscles can atrophy and the effects are often irreversible.

Current treatments for CTS include conservative treatments such as splinting, medications and stretching exercises. If these treatments are ineffective, there are two traditional surgical techniques available: endoscopic surgery and open surgery.

The Guo Technique: Thread Carpal Tunnel Release (TCTR)

Ultrasound technology precisely maps out the anatomy of the wrist and is then used to guide a thin needle through the base of the hand, underneath the transverse carpal ligament and exiting in the wrist. Through this needle, a thin smooth thread is fed.

Illustration showing location of needle through the base of the hand, underneath the transverse carpal ligament.

Another needle is inserted through the base of hand at the same insertion point as the first needle. Using ultrasound guidance, the needle is guided over the transverse carpal ligament and the thin smooth thread is again looped through, back out the original needle site.

The thread surrounds the transverse carpal ligament and is manipulated, in a back and forth motion, to divide the transverse carpal ligament and release pressure on the median nerve.

Once complete, the thread is removed and the hand is bandaged. The entire procedure usually takes less than 15 minutes.

For additional information or to make an appointment, please call BayCare Clinic Pain & Rehab Medicine 920-288-8377.