

James Grimes, M.D.,
in Mercy's surgery
suite, where he
performs minimally
invasive surgery to
correct carpal
tunnel syndrome.



CARPAL TUNNEL Syndrome...

Endoscopic surgery offers minimally invasive solution

Do you have numbness or tingling in your hand and wrist when writing, driving or doing repetitive tasks? Does pain in your hand wake you up at night? Do you have trouble opening jar lids due to hand

weakness? If so, you may have carpal tunnel syndrome.

'Carpal' means wrist, and the 'tunnel' refers to a passageway that contains flexor tendons and the main nerve to the thumb and fingers.

"This passageway can become tight for a number of reasons, and the nerve gets squeezed," according to James Grimes, M.D., an orthopedic surgeon specializing in minimally invasive surgery. "Pressure on the nerve causes numbness, tingling, pain and weakness. In advanced cases, the muscles to the thumb can waste away."

In our technological society, carpal tunnel syndrome is extremely common. Carpal tunnel syndrome is the most common peripheral nerve entrapment. It affects millions of people in the United States every year.

In milder cases, the symptoms can be relieved by bracing and taking anti-inflammatory medication. However, if the pain, numbness or weakness persist, a carpal tunnel release is required, Dr. Grimes said.

"For 60 years, the standard treatment was an open carpal tunnel release. This involved making an incision in the palm to release the ligament. Although effective, there were a number of side effects from the surgery itself," said Dr. Grimes.

"Open carpal tunnel release requires dividing all of the tissues overlying this ligament — skin, fat, tendon and muscle. This makes for a very sore hand for several months," he explained. "Your palm has many nerve endings, like the tips of your fingers. With open carpal tunnel release, it is not uncommon for patients to have persistent scar sensitivity."

The objective of a carpal tunnel release is to divide what is called the transverse carpal ligament. This takes the pressure off the nerve and relieves the symptoms of carpal

tunnel syndrome.

"The beauty of endoscopic carpal tunnel release is that it is done through a single incision in the flexion crease of the wrist and leaves no scar on the palm," said Dr. Grimes. Specialized instruments are passed into the tunnel through a one-half inch incision above the palm. The ligament is visualized and divided from the inside out. All of the structures overlying the carpal tunnel are left intact.

He added that the minimally invasive surgery is of particular benefit to patients with carpal tunnel syndrome in both hands. "With open carpal tunnel release, you would not do both hands in the same session because the patient's hands would be too sore to use. You need at least one usable hand. With the endoscopic technique, both hands can be released in the same session because the patients have much less pain and can use their hands for light activities immediately after surgery. This really speeds up return to work because both hands are recovering at the same time."

Dr. Grimes advises patients with carpal tunnel symptoms to have it checked out early. "The longer the nerve is compressed before the procedure, the longer it takes to recover afterwards."

