

## WHAT ARE THE BENEFITS OF SINGLE PORTAL ENDOSCOPIC VS. TRADITIONAL OPEN SURGERY?

### Endoscopic - Carpal Tunnel Release

1. Performed for many years
2. Proven to be effective
3. Minimal incision/scaring 1/4" incision at wrist crease
4. Quicker Return to life/work average 15 days quicker than open CTR\*
5. Quick Outpatient procedure
6. Quicker recovery of hand strength
7. Less Pain and Scarring

### Open - Carpal Tunnel Release

1. Performed for many years
2. Proven to be effective

### What Can I Expect After Surgery?

- ✓ Sutured incision
- ✓ Wrist and hand will be dressed
- ✓ Ability to perform gentle hand exercises will begin soon after surgery
- ✓ Average recovery time for endoscopic 3-5 days, average recovery time for open 10-14 days
- ✓ Progressive pain relief while sleeping



### Proven Single Portal Endoscopic Carpal Tunnel Treatment and The Benefits:

- ✓ Quick outpatient procedure
- ✓ Quick recovery – Average 7-11 days quicker Vs. open
- ✓ Minimal scaring – 1/4" incision at wrist crease
- ✓ No restrictions after 48 hours
- ✓ Return to life much quicker

\* Trumble, TE et al: Single-Portal Endoscopic Carpal Tunnel Release compared with open release. JBJS. July 2002; 84-A (7): 1107-1115.

### Discuss the Options With Your Doctor

If you need carpal tunnel surgery, your doctor will help you make an informed decision by explaining your surgical options and the risks associated with both the open and endoscopic procedures. If you choose the endoscopic procedure, your doctor will also explain that there is a very small chance the procedure would have to be converted to the open method.



Carpal tunnel release has been proven to be a highly successful surgery with excellent results for most patients. Your doctor will be happy to answer any questions you may have about CTS and its treatment.

### MicroAire Distributor

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## Endoscopic Carpal Tunnel Release

### Suffering from Carpal Tunnel Syndrome?



## Take Life By The Hand...

Ask your doctor about endoscopic carpal tunnel release:

- ✓ Quick outpatient procedure
- ✓ Return to life 15 days quicker than open surgery\*
- ✓ Single 1/4" incision
- ✓ Less scarring

**CTRS**  
Carpal Tunnel Release System

**MICROAIRE®**



### Taking hold of your own life...

Your hands' are essential to the quality of your life. Hands allow you to hold your loved one's, they help you in daily chores and they help provide for you and your family.

Fortunately, there are significant advancements in the treatment for Carpal Tunnel Syndrome (CTS). If you feel you have CTS contact your doctor at once, early diagnosis is very important to achieve the best results and avoid permanent damage.

### What is Carpal Tunnel Syndrome?

In the center of the wrist, there is a space called the carpal tunnel where a major nerve (the median nerve) and nine tendons pass from the forearm into the hand. A very strong ligament forms a roof over the tunnel. When there is swelling in the carpal tunnel, pressure is put on the median nerve, which supplies most of the fingers and thumb with feeling and movement. When pressure becomes great enough to compress the nerve, Carpal Tunnel Syndrome may occur.

#### Most Common Symptoms of Carpal Tunnel Syndrome?

- Numbness
- Pain While Sleeping
- Pain in the fingers, hand and wrist may extend up the arm
- Tingling
- Burning
- Pain During Sleep

These symptoms may occur alone or in combination in either or both hands. Numbness or tingling is felt most often in the thumb, index, middle, and ring fingers. The symptoms frequently occur at night. They may also be noticeable while performing daily activities like reading, driving, and doing household chores. A weakening of the grip may become apparent, along with a tendency to drop objects.



The transverse carpal ligament is the roof over the bony carpal tunnel which houses nine tendons and the median nerve. When there is swelling within the tunnel, pressure is put on the nerve. Pain, numbness and tingling may result.



### WHAT ARE THE TREATMENT OPTIONS?

- A** CONSERVATIVE TREATMENT
- B** TRADITIONAL OPEN SURGERY
- C** SINGLE PORTAL ENDOSCOPIC SURGERY MICROAIRE SOLUTION

#### **A** CONSERVATIVE TREATMENT - Non-Surgical Treatment

Reducing activities that cause continuous exertion or repetitive use of your hands, or keeping the wrist in a neutral position may help reduce the swelling within the carpal tunnel and relieve pressure from the nerve area. Also, wearing wrist splints at night may relieve the symptoms and accommodate a better night's rest.

Anti-inflammatory medication taken orally or injected into the carpal tunnel may help reduce the swelling and relieve symptoms.

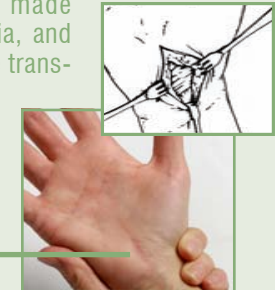
#### **B** TRADITIONAL OPEN SURGERY - Surgical Treatment

In this procedure, an incision made through layers of skin, fat, fascia, and muscle, to identify and divide the transverse carpal ligament.

##### AVERAGE RETURN TO WORK<sup>1,2</sup>:

- Modified work 10-14 days
- Regular work, non-dominant hand 42 days

Open Surgery Scaring  
1-2" long in palm of hand



#### **C** SINGLE PORTAL ENDOSCOPIC SURGERY - MicroAire Surgical Solution

This procedure is performed using a device manufactured by MicroAire Surgical Instruments called the Carpal Tunnel Release System (CTRS). This device views and releases the carpal ligament through one portal incision 1/4" small. Via the incision a small blade housing the endoscope is inserted into the carpal tunnel canal providing an "inside view" via a video monitor. The surgeon watches the monitor and is able to precisely cut the ligament with a blade by pulling the trigger and pulling

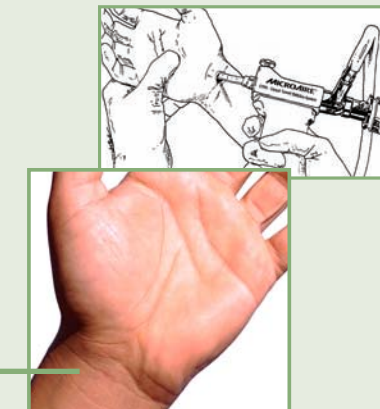
back on the device. During single portal endoscopic carpal tunnel surgery, the ligament is released without having to cut through the skin and muscles of the palm resulting in less pain and less scarring pain. To learn more about this patented device and the procedure please visit [MicroAire @ www.microaire.com](http://MicroAire.com).

##### AVERAGE RETURN TO WORK<sup>1,2</sup>:

- Modified work 3-5 days
- Regular work, non-dominant hand 28 days

= *Quicker back to life/work*

Single Portal Surgery Scaring  
.25" long in wrist crease



1 Agee, JM et al: Endoscopic release of the carpal tunnel: A randomized prospective multicenter study. *Journal of Hand Surgery* 1992; 17(6): 987-995  
2 Trumble, TE et al: Single-Portal Endoscopic Carpal Tunnel Release compared with open release. *JBJS*. July 2002; 84-A (7): 1107-1115.

