# Joint Pain: Wrist, Knee, Shoulder, Ankle, Elbow, TMJ

DELLON INSTITUTES FOR PERIPHERAL NERVE SURGERY®



### YOUR COMPLAINTS ARE

Your wrist hurts when you bend it up or down.

Your knee hurts when you walk, climb steps or kneel.

The outside of your ankle hurts when you walk.

The front of your shoulder hurts when you lift your arm.

Your elbow hurts on the outside, *Tennis Elbow*, or the inside, *Golfer's Elbow*, with certain movements.

The side of your jaw hurts when you bite down.

### WHAT CAUSES YOUR COMPLAINTS?

*Small nerves* that are in the painful joint have been injured.

These nerves do not go to the skin or to muscles.

These small nerves only send a message of pain.

These nerves were torn or stretched when you either:

directly injured that joint in an accident, or

developed arthritis from natural causes, or

had an operation in or around that joint.

### TREATMENT WITHOUT SURGERY

Be sure to see a medical or surgical specialist interested in Sports Medicine, Orthopedic Surgery, or Podiatric Foot and Ankle Surgery. They will examine the ligaments to be sure they are not damaged, and obtain special x-rays, like a MRI, to evaluate the ligaments and joint structures.

If it is your jaw that hurts, see a Dentist or an Oral Surgeon.

Structural integrity (strength) of *all* joint structures must be present before a joint denervation procedure can be done.

Your doctor will prescribe anti-inflammatory medication or you may have had a "cortisone shot" into the joint.

You doctor may suggest physical therapy to strengthen the muscles and ligaments around the joint, and/or a brace.

If it is your jaw, you will try "bite blocks" or realign your teeth.

You may have already had surgery on your joint, such as arthroscopic surgery, or even had a joint replaced.

### WHEN SHOULD I HAVE SURGERY?

When your joint pain symptoms are unrelieved by the above approaches, and you wish to be more active without pain.

A nerve block will be given to be sure which nerve(s) cause(s) your pain. If this relieves your pain, then partial joint denervation can be up to 90% successful.

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## WHAT IS THE SURGERY LIKE?

The surgery takes about one and one-half hours.

The surgery is performed as an outpatient.

The surgery is performed with general anesthesia.

An incision is made over the location where the nerve sending the pain signal is located.

Each nerve is removed without entering the joint.

The end of the nerve is put into a new place, like a muscle, so it cannot grow back to the joint and cause pain again.

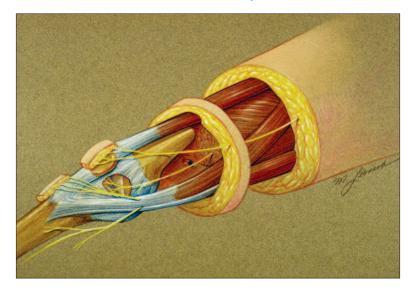
Local anesthesia is placed into the skin and around the nerve so there is little pain after the surgery.

You can use your shoulder, arm, wrist and hand, or your leg, knee, ankle, and foot, or your jaw (eating and talking), IMMEDIATELY AFTER SURGERY.

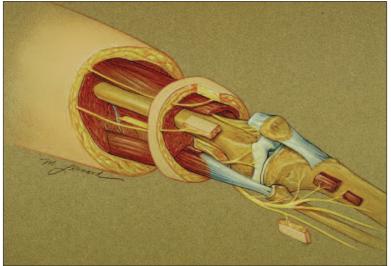
There is no loss of motor function with this surgery, and you will still know what position your joint is in.

Usually, no therapy is necessary, but gradual strengthening is encouraged as your body needs to learn to use that joint normally again. Water walking or water therapy is often the best way.

### LOCATIONS OF NERVES TO JOINTS

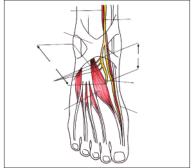


Nerves to the inside of the knee joint and the surrounding skin.



Nerves to the outside of the knee joint and the surrounding skin.





LEFT
Nerves to the front of the shoulder.

RIGHT Nerves to the outside of the ankle joint.

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### WHAT ARE THE RISKS OF SURGERY?

The published outcomes of the Dellon-approach to the treatment of joint pain of neural origin offer the best chance for success for relief of your symptoms. There are risks associated with every surgical procedure, such as the risk of anesthesia, bleeding and infection.

Complications unique to joint denervation procedures are:

Unpredictable nature of the healing process (scar formation).

If nerves to the skin were entrapped in scar from previous operations, and need to be removed in addition to the joint denervation, then there will be areas of skin remaining numb.

Need for a second surgery to remove an additional nerve will be necessary in 5 to 10% of people.

Underlying arthritis will continue.

If a joint has been replaced, there is the rare risk of either exposing the joint implant or an infection occurring around the implant.

# WHO SHOULD DO THIS SURGERY?

Surgeons from the *Dellon Institutes for Peripheral Nerve Surgery*® have the most advanced training
and experience doing this surgery, which offers you
the best chance for success.

### BEING ACADEMIC IN PRIVATE PRACTICESM

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