



## Information about Selective Denervation Care4Dystonia, Inc.

Research has shown that the most efficacious treatment today for dystonia is botulinum toxin therapy. However, there are several primary irreversible surgical procedures available for dystonia: selective denervation, pallidotomy, thalamotomy, and deep brain stimulation. You can learn more about these other procedures in our guide DeMystifying Dystonia.

### SELECTIVE DENERVATION

This procedure was first developed in the early 1980s by Dr. Claude Bertrand, M.D. and his colleagues in Montreal, Canada. Since its introduction, varying success rates have been reported. It is primarily used in the management of cervical dystonia (torticollis). Denervation involves cutting the nerves that supply the specific group of muscles that play a role in your dystonia. Once the nerves have been cut, the muscle or group of muscles atrophy (weaken) permanently. Denervation cannot be reversed. Therefore, it is extremely important to correctly identify which muscles are contributing to the symptoms. The information can be obtained from a detailed electromyography (EMG) exam.

You can be a candidate for this procedure if:

- Your symptoms have not improved with oral medications or botulinum toxin injections
- Your symptoms are limited to one direction and/or muscle group
- You have no other major medical problems that may interfere with the procedure
- Your symptoms have been limited to a timeframe of less than 5 years.

The 4 to 6 hour long procedure is performed on an in-patient basis under general anesthesia, with a 3 to 5 day hospital stay. Prior to surgery, you are evaluated by the neurosurgeon, videotaped, a detailed EMG is performed and an assessment of your symptoms under general anesthesia may be performed as well to clarify your candidacy for this procedure.

You may experience some of the following symptoms after surgery:

- ▶ Pain
- ▶ Pressure
- ▶ Mild neck weakness/swelling
- ▶ Mild numbness
- ▶ Hoarseness
- ▶ Difficulty swallowing
- ▶ Neck stiffness
- ▶ Headache
- ▶ Lack of balance

The neurosurgeon most experienced with this procedure is Dr. Carlos Arce, MD. To date, he has performed over 400 denervations for cervical dystonia. You find more info about the experiences of others who have undergone the procedure at [www.spasmodictorticollis.org](http://www.spasmodictorticollis.org).

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