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ANTERIOR CERVICAL DISCECTOMY WITH CERVICAL ARTHROPLASTY

INDICATIONS:

The indications for this operation really boil down to three things.

1. Pain in the arm that is becoming unbearable.
2. Numbness in the arm or hand.
3. Weakness in the arm or hand.

Notice that I did not mention neck pain as a true indication for doing this operation. Commonly neck pain is improved from the surgery but all by itself, I do not consider it a freestanding indication for this operation.

GOALS:

The real goals of the operation are simply to decompress the nerve roots and the spinal cord at the affected level. The hope is that by releasing the pressure on the nerves and/or spinal cord that the pain down the arm will be diminished or be eliminated, and this should maximize your potential to regain function in the nerve root and/or spinal cord. There are no guarantees that you will get your function back but it does maximize your potential to do so. It certainly should prevent any further loss of strength or sensation in the arms or from spinal cord compression.

PROCEDURE:

The basic operation is an inch-and-a-half long incision on the front of your neck on the right side. I dissect down to the disc space. I will remove the disc that is pressing on your spinal cord or nerve root and if there are any bone spurs those too will be removed. When I am finished with this part of the dissection, there will be no pressure on your spinal cord or nerve roots at that level. After I have decompressed your spinal cord and nerve roots I will custom fit the arthroplasty disc replacement device to your residual disc space so that it fits perfectly. I insert it within the disc space and tighten down the screws. I then close the wound with three layers of stitches with a plastic surgery final closure.

RISKS:

The risks of this operation include but are not limited to the following:

1. Risk of bleeding. My average blood loss is less than one ounce and I have never had to give a transfusion in my career for this operation. Over the last 20 years, I have operated on perhaps 5,000 levels and again I have never had to give a transfusion a single time.

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2. Infection. The national average for an infection for an American Neurosurgeon is about 3%. I have had one in my career so I have been very blessed with an extremely low infection rate.
3. Stroke or death. These are both primarily anesthetic complications and I have never had anyone have a stroke or die during one of these operations but is a possibility anytime anyone undergoes general anesthesia.
4. Cerebral spinal fluid leak. This is an extremely rare possibility which has happened twice in my career. It is a complication that is rare but difficult to handle but has never caused any long-term issues with my patients.
5. Voice change. This surgery does not injure a patient's vocal cords. However, the nerve that goes to the vocal cords is always stretched during this operation. About 15% of people wake up with a breathy or hoarse voice generally due to the endotracheal tube. However, nationally 1% of people have a permanent voice change because of permanent injury to the nerve that goes to the vocal cords. I have had one patient in my career with a permanent voice change. Generally, the ear, nose, and throat doctors can repair this.
6. Hardware failure. This is extremely high quality stainless steel that has been exceptionally well engineered. However, screws can back out although it is extremely rare. Should that occur, I would have to replace the screw.
7. Spinal cord injury. During this operation, I literally touch your spinal cord and the dura or sheath around it multiple times. Therefore, there is a risk of damaging your spinal cord. If that should occur, I could cause you to become a quadriplegic with loss of bowel, bladder, or sexual function and all movement below your neck. I have never damaged a spinal cord in my career but it can happen.
8. Nerve root damage. Because I will be operating on both sides of your neck and decompressing both nerve roots, that is the one that goes down your right arm as well as the one that goes down your left arm, I could injure either one. If I damage those nerves, I could cause you to have permanent pain, numbness, tingling, and weakness down the arm. That is a very rare complication in my experience and I do everything I can to avoid that from occurring but that is a potential possibility.

I know these potential risks and complications are frightening and indeed, if they occur they are very serious. However, I want you to recognize how rare they happen in my hands and I think you should feel confident that we can do this surgery very successfully. The operation itself does not hurt very much and generally speaking, you will be able to go home the next morning. I do not use a catheter in your bladder during the operation. If you want more information on this procedure, please visit my website at www.timjohansmd.com.

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