PRESTIGE Cervical Disc Jenna Marcus October 16, 2006

Medtronic Sofamor Danek Company developed the PRESTIGE LP Cervical disc in 2004. The disc is used to replace a degenerative disc in the cervical spine. The cervical spine is made up of the first seven vertebrae of the spinal column. There are discs between each of the vertebra that act as cushions for the adjacent discs.



Degenerative Disc Disease (DDD) is a disease in which the ligaments surrounding the discs become brittle and the gel-like center of the disc begins to dry out. This disease causes severe neck pain, stiffness, and sometimes numbness. In some situations, the pain can affect the back.

Diagnosis can be made with the use of various diagnostic exams:

~x-ray utilizes photographic film to absorb electromagnetic radiation transmitted through a material body

~CAT scan is also known as a CT scan. It utilizes a computer to produce detailed threedimensional images of a body from a collection of cross-sectional x-rays taken along an axis. ~MRI stands for magnetic resonance imaging. It is a technique for imaging the spine that involves rotating a magnet around the body.

~Myelogram involves injecting a radiographic contrast dye into the sac (dura) surrounding the spinal cord and nerves, and then taking x-rays of the spine. Abnormalities within the spinal canal can then be identified to aid in the diagnosis of certain spinal problems, such as nerve compression or a disc rupture.

~Discograms may be done to establish whether a degenerated disc is causing your back or radicular pain. Radiopaque dye is injected into the disc nucleus. In a normal disc the dye will be contained within the central nucleus. If the dye leaks out of the nucleus in to the surrounding tissue, then the disc is considered to be abnormal.

~A bone scan involves intravenously injecting a small quantity of a radiographic marker into the patient, and then running a scanner over the area of concern. The scanner detects the marker, which concentrates in any region exhibiting high bone turnover. A bone scan is utilized when there is suspicion of tumor, infection, or small fractures.

The PRESTIGE Cervical Disc is made of two articulating components. The two components are attached to adjacent vertebral bodies. Biocompatibility is assured through use of materials that have a long-term implantation success record.



The surgical process is very simple and the patient is usually out of the hospital within 24 to 48 hours. Stabilization rails on the cervical disc make it possible for the implant to be secure in the adjacent vertebra.

Clinical trials have been completed and a formal recommendation has been made to the FDA to approve this device.

Sources:

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