The NuNec surgery is nearly similar to the surgical technique of ACDF and surgeons are very familiar with this technique. For the NuNec surgery the NuNec implant is inserted whereas for ACDF the vertebrae are fused.

During surgery you may be placed on your back so that your surgeon may approach the affected spine segment through a small incision in the front of your neck. This provides direct access to the disc space and the diseased disc will be removed. Then the surgeon may select the most appropriate size of the NuNec device. Finally, the NuNec may be inserted and the incision will be closed.

After the surgery, most patients may experience mild pain at the incision site combined with achy discomfort across the neck and shoulder blades. The pain is commonly treated with mild analgesics medications. In most of the cases the pain disappears within 7 to 10 days.

After surgery, you may return to limited activity within a week and you may be able to resume your normal activities within a month. Within 3 months all other restrictions will be lifted. Your surgeon will advise a post-op activity program suitable to your age, general health and physical condition.

Depending on you and your surgeon’s preference you may be asked to wear a soft collar for a few weeks.

The NuNec Interspinous Cervical Arthroplasty System
- Quick rehabilitation
- Allows further treatment options
- Designed for motion, not fusion
- Clinically proven concept

Discuss with your surgeon if this is a feasible treatment option for you.
INTRODUCTION

Degeneration of the spine is a normal consequence of aging and happens to everyone to a certain extent. One aspect of the degeneration of the spine is the intervertebral discs losing their height and their shock-absorbing capacities. This results in narrowing of the nerve canal with subsequent pinching and bone spurs.

If one of the discs from your cervical spine (neck) herniates, it may result in pressure on the nerves and spinal cord. This will cause pain, which might be associated with weakness and/ or numbness in your arms and/ or neck.

Traditionally removal of the disc and fusion of the two adjoining vertebrae with interbody spacer, metal plates and screws, the so called ACDF (Anterior Cervical Discectomy and Fusion) procedure, has been the gold standard. A disadvantage of this procedure is the stiffening of the operated level.

The NuNec Cervical Arthroplasty System is specifically designed for patients suffering from radiculopathy and myelopathy related to degenerative cervical disc disease. It has the unique advantage of maintaining the motion of the operated level.

Your doctor has provided you with this brochure to help you make an informed decision regarding the treatment features offered by the NuNec Cervical Arthroplasty System from Pioneer Surgical Technology.

NUNEC: SOLUTION FOR YOUR SYMPTOMS

The symptoms you may experience are:

- Neck pain and/or arm pain
- Numbness and/or weakness in your arms.

Pain Areas Caused by Cervical Spine Degeneration

The NuNec implant is generally indicated for patients with cervical radiculopathy and/ or myelopathy caused by cervical disc degenerative disease.

The NuNec device is not indicated for patients with any of the following:

- Infection
- Osteoporosis
- Cervical instability
- Allergy or sensitivity to PEEK, titanium or tantalum
- Severe spondylosis
- Conditions that may lead to bone formation

NUNEC: THE IMPLANT

The NuNec procedure is intended to relieve your symptoms while preserving important anatomical structures and functions of your spine. The NuNec implant replaces the diseased disc with a functional artificial disc. The design mimics the function of a natural cervical disc for both motion and disc height.

The NuNec device is composed of two parts: an upper plate with a cavity, “socket”, and a lower plate with a ball. Together the ball and socket imitate the motions of a natural healthy disc such as flexion, extension, bending and rotation.

The NuNec implant is positioned between the vertebrae after removal of the natural diseased disc. A cam designed specifically for the NuNec device is used to fixate the implant into the vertebrae by turning the teeth of the cam.

As every person has a different anatomy, the NuNec device is available in a variety of sizes to match closely to your anatomy.

The NuNec implant is made from a medical grade plastic (polyetheretherketone) named PEEK-OPTIMA® that has a long clinical experience (over 20 years) and has demonstrated safe use in patients.

Fluoroscopy

Lateral  A/P

Pre-op  NuNec: 3 months  NuNec: 6 months