



Operation Information

Anterior Cervical Discectomy and Fusion (Cage + Plate)

Introduction

Anterior cervical discectomy and fusion is a surgical procedure used to treat neck problems such as bulging, herniated disc, degenerative disc disease and spinal instability, etc. Discectomy is the removal of the disc and any fragments between the vertebrae. After the disc is removed, the space is filled with a bone graft, the goal is to help the bones to fuse together into one solid bone. This is known as fusion. In order to provide stability during fusion, the doctor may reinforce the bone graft with a metal plate screwed into the vertebrae (cage and plate).

Bone grafts are made from your own bone cells from the ilium (autograft), a donor (allograft), titanium metal, man-made plastic, ceramic or bioresorbable compounds (bone graft substitute). The doctor will explain the risks and benefits of different types of bone graft materials to the patient before the operation.

Outcomes

The expected outcomes of this operation are to treat for symptoms due to cervical spondylosis aims to relieve pain and prevent further permanent damage to your nerves.

Procedures

1. The operation is performed under general anaesthesia.
2. You lie in supine position.
3. If autograft is used, the iliac area is also prepped to obtain a graft.
4. An incision is made above the collar bone at front of the neck.
5. Instruments are used to separate and hold the neck muscles and soft tissues apart so that the doctor can work on it.
6. An X-ray is taken to identify the correct disc.
7. The damaged disc and fragments that are pressing on the spinal nerves are removed.
8. An incision is made over the crest of the ilium, a section of bone graft is obtained from the upper most of pelvis (for autograft only).
9. The bone graft is then shaped and placed into the space between the vertebrae.
10. A metal plate is fixed into the vertebrae to reinforce the bone graft (optional).
11. A drainage tube may be placed in the wound. The skin is stitched.

Possible Risks and Complications

1. Wound infection
2. Nerve damage
3. Vertebrae fail to fuse
4. Bone graft migration
5. Implants (e.g. screw, plate, cage) failure, fracture, loosening, subsidence or displacement
6. Persistent pain

** The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all operations are carried out with utmost professionalism and care, this does not rule out the possibility of complications arising. In the event of peripheral organ damage or post-operative haemorrhage or leakage, further operations may be required.

Pre-operative Preparations

1. Good hygiene can prevent wound infection. Therefore, we advise you to clean up yourself on the day of operation.
2. The procedure and possible complications will be explained by the doctor and a consent form must be signed prior to the operation.
3. Please inform the doctor and nurse all your past medical history, previous surgical operations, current medication and any complication with drug or anaesthesia.
4. No food or drink six hours before operation.
5. Please change into a surgical gown after removing all belongings including undergarments, dentures, jewelry and contact lenses.
6. Please empty your bladder before the operation.

Post-operative Instructions

General

1. After general anaesthesia, you may:
 - experience discomfort in the throat after tracheal intubation.
 - experience side effects of anaesthesia including feel tired, drowsy, nausea or vomiting.Inform the nurse if symptoms persist or worsen.
2. Please inform the nurse of wound pain. Proper pain relief treatment by injection or oral medication may be prescribed by the doctor.
3. You should avoid bending the head forward or backward. You may need to wear a neck collar for protection.
4. You may need help with daily activities such as mobilisation and bathing.
5. The hospital stay is typically for 1 – 2 days which may vary with health condition of the patient.

Wound Care

1. The wound will be covered with a sterile dressing which must be kept clean and dry.
2. The stitches or staples will be removed at an out-patient clinic during subsequent follow-up visit.

Diet

1. A normal diet may be resumed as instructed after recovery from anaesthesia.
2. Make sure there is no difficulty in swallowing when resuming normal diet.

Advice on Discharge

1. Medication for pain relief may be taken as needed.
2. Recovery time for the wound generally takes 4 – 6 weeks. Recovery of neurological symptoms started before surgery varies, depends on cause and severity of the symptoms.
3. You should avoid bending the head forward or backward or turning your neck excessively.
4. Do not lift any heavy objects.
5. You may gradually return to normal activities. You should avoid sitting for long periods of time, walking is encouraged especially for those who had bone graft taken from the hip.
6. You may wear a neck collar for several months to hold the neck still in order to let the bone graft heal and fuse (for those with Cage only).
7. You may shower after discharge unless otherwise instructed. The dressing must be kept clean and dry.
8. Immediately consult your doctor or return to hospital for professional attention in the event of severe wound pain associated with redness and swelling, secretion of pus, massive bleeding, shivering, high fever over 38°C or 100.4°F, or any other unusual symptoms etc.
9. Any follow-up consultations should be attended as scheduled.

Should there be any enquiries or concerns, please consult the attending doctor.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

Compiled by Union Hospital Operating Theatre (OT) Governance Committee

The above information is for reference only, please enquire your physician for details
Our Hospital reserves the RIGHT to amend any information in this leaflet without prior notification