

Cervical Arthroplasty / Insertion of Artificial Disc

PROCEDURE

A skin cut is made usually across the right side of the neck. The surgeon then gains access to the disc by going between the carotid artery, which supplies blood to the brain, and the trachea (wind pipe) and oesophagus (food pipe). An x-ray is used to confirm the level(s) that requires surgery.

These above structures are held out of the way with retractors and the surgeon then proceeds to remove the disc to relieve the pressure from the spinal cord and nerves using the microscope.

After this has been performed, an artificial disc of the appropriate size is then inserted into the disc space. X-rays will be used throughout the operation so that the implant is placed in the ideal position.

The wound is then closed with dissolvable stitches. A drain may or may not be used.

COMPLICATIONS

Anaesthetic:

You will be given a general anaesthetic for the procedure. Local anaesthetic is also used along the incision. Anaesthesia is quite safe. The death rate due to anaesthesia for fit, healthy people is very low. Risks may be increased due to smoking, being overweight, diabetes, heart disease, kidney disease, high blood pressure, and other serious medical conditions. Risks are also increased in the elderly.

Serious complications from anaesthesia are very uncommon and care is taken to prevent these problems. They include:

- a) Severe allergic reactions
- b) Breathing difficulties
- c) Stroke or brain damage, which may cause permanent disability
- d) Strain on the heart, which may result in a heart attack
- e) Awareness whilst under general anaesthetic.
- f) Weakness or numbness from pressure on peripheral nerves (e.g. elbow, hip, knee)
- g) Skin reaction to tapes used, particularly around the face, lips and/or chin.
- g) Blood clots

Damage to teeth may occur, but this is uncommon. Minor problems, however, are and these include nausea and vomiting, general aches and pains, pain at operation and injection sites and sore throat.

General Risks Associated with the Procedure:

- Wound infection, chest infection, heart and lung complications and thrombosis may occur. These risks are increased in obese people and smokers and can be reduced by weight loss, however small, and/or giving up smoking, prior to surgery.
- It is advised that you should not drive, operate heavy machinery, or witness and/or sign documents until after your first post-operative discharge appointment when you should discuss this with your doctor.

Specific Risks to this Procedure:

- Numbness over the side of the neck immediately above the incision. This usually improves in time.
- Injury to the larynx (voice box), the nerves to the larynx (recurrent laryngeal nerve) causing vocal cord paralysis and a hoarse voice. This is usually temporary but may require further surgery.
- Infection: Superficial infection in the wound causing redness, pain and possible discharge or abscess. This may need antibiotics. Deep Infection: may result in osteomyelitis or discitis; this is very uncommon.
- Injury to the oesophagus (food pipe) which may require further surgery.
- Injury to the carotid artery and/or vertebral artery, which can cause a stroke. This is very uncommon.
- Injury to a nerve root, which would result in weakness and/or altered sensation, which may be temporary or permanent.
- Pain between the shoulder blades, which usually settles but may last up to six weeks.
- Injury to the spinal cord, which may result in weakness or even paralysis of the arms and legs. This may be temporary or permanent, but is extremely rare.
- Ongoing neck or upper limb pain, which may be temporary or permanent.
- Displacement of the implant resulting in swallowing difficulties and possibly spinal cord compression which may require removal of the implant.
- The implant may not be able to be inserted in the ideal position. This can sometimes only become obvious during surgery. A conventional anterior fusion may have to be performed. A fusion cage will be inserted instead of the artificial disc.
- The mobility of the implant is restricted with the passage of time and sometimes fusion can occur across the implant, which will cause the implant to stop moving. This usually does not result in any problems.
- The implant may wear out with the passage of time, usually after many years, and if this becomes a problem, further surgery may be required.