

Neurosurgeon and Complex Spinal Surgeon MBBS Hons FRACGP FRACS MAICD

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Anterior Cervical Discectomy & Fusion

The indications for performing an anterior cervical discectomy and fusion are to relieve pressure on the spinal cord or exiting nerve roots as they course behind the vertebral bodies and discs. This is particularly so if there is evidence of intractable severe arm pain (>4 weeks) or progressive neurological deterioration (weakness, numbness, paralysis).

OPERATION

The operation is performed under a general anaesthetic with the patient lying on their back. A small incision is made on the right side of the neck, low down near the bottom skin crease. The arteries to the brain and the gullet and windpipe are then separated along a well-defined plane and the front of the spine exposed. A x-ray is then performed to ensure the correct disc space is found. Under high magnification the disc prolapse is then removed in its entirety. Usually the offending disc fragment that has prolapsed is found and removed under direct vision. Full decompression of the spinal cord and nerve roots is performed.

Once this is achieved there are several options. The most common option nowadays is to place a 'cage' into the emptied disc space, between the vertebral bodies. This cage is filled with bone graft or bone substitute and allows bony growth and fusion between the two adjacent vertebral bodies. Occasionally a piece of the hip bone is taken and placed into the emptied disc space. If there is any suggestion of instability in the cervical spine or there have been several disc prolapses removed, a titanium plate is then secured to the vertebral bodies overlying the cage implant.



The skin is then closed with dissolvable sutures and then patient woken up from the anaesthetic.

RISKS OF THE PROCEDURE

The risks of this procedure includes the following. A detailed discussion with your surgeon is recommended prior to surgery.

- [°] Infection: may be superficial or deep involving bone and /or disc space.
- ° Bleeding: may be superficial bruising or a deeper collection.
- ° Numbness over the side of the neck above the incision.
- ° Injury to the larynx or the nerves of the larynx causing a hoarse voice (usually temporary).
- ° Injury to the oesophagus causing difficulty swallowing (usually temporary).
- ° Injury to a major vessel causing stroke like symptoms (very rare).
- ° Injury to a nerve root resulting in weakness and/or altered sensation.
- ° Pain: between the shoulder blades, usually temporary but may be permanent.
- ° Injury to the spinal cord resulting in weakness, numbness or paralysis (extremely rare).
- ° Ongoing neck or upper limb pain.
- ° Ongoing upper limb numbness or weakness.
- ° Failure of the operation or fusion.
- ° Movement of the graft or instrumentation.
- ° A hip bone graft has specific risks: infection: bleeding, numbness & hip pain for several weeks.