

Risks and Potential Complications with Anterior and Posterior Cervical Surgery

Anterior Cervical Surgery

Clearly surgery in this part of the body is extremely delicate and only highly well-trained individuals embark on this. Generally anterior surgery of the neck is very safe in hands of a competent and experienced surgeon and major complications are very uncommon. More than 90% of patients go through their surgery without any issues. Risk of major complications is less than 1-2% and minor complications are less than 5%. Complications include but not limited to:

- Overall the chances that surgery fails or does not help significantly with the symptoms and/or lead to development of new or a different symptom in less than 5%
- Nerve damage is less than 1%
- Spinal cord damage is extremely rare. This could lead to paralysis or quadriplegia, problems with breathing, bowel and bladder control
- Infection: less than 1%. Deep infections could lead to further surgery or prolong antibiotic use
- Blood clot in the wound. Large clots may need urgent evacuation but this is again very rare.
- Surgery on incorrect level. This is well recognized in the literature but with use of repeated x-rays and review by surgeon and assistant surgeon during surgery, this risk is minimized.
- Risk of CSF leak (<1%)
- Risk of injury to the vessels. These are again rare but could lead to stroke or blood clots in the vessels.
 - Vertebral artery injury
 - Carotid artery injury
 - Jugular vein
- Visceral injury: again extremely rare, including the Oesophagus (food pipe), trachea (wind pipe)
- Hoarse voice
 - Minor sensation of scratchy throat is common after surgery that disappears after a few days
 - Significant voice change due to tension on the nerve to the vocal cords is uncommon but may be permanent in <1%.
- Swallowing difficulty, not uncommon during the first few days but sometimes can last several weeks.
- Horner's Syndrome. This is having a droopy eyelid and small pupil due to stretching or injury of sympathetic nerves. It is rare and often resolves after a few weeks to couple of months.
- When fusion is performed:
 - Implant failure or suboptimal positioning can occur but very uncommon. If this is causing any problem or may cause a problem in future, it may need further surgery for correction
 - Failure to develop bony union or fusion. May need revision surgery.
 - "Adjacent level degeneration" or Accelerated degeneration of adjacent level. Due to slight increase in the workload for the adjacent discs there is a small risk of needing further surgery in the future after several years.

Posterior Cervical Surgery

- Overall the chances that surgery fails or does not help significantly with the symptoms and/or lead to development of new or a different symptom is about 5%
- Nerve damage is less than 1%
- Spinal cord damage is extremely rare. This could lead to paralysis or quadriplegia, problems with breathing, bowel and bladder control
- Infection: less than 1%. Deep infections could lead to further surgery or prolong antibiotic use
- Blood clot in the wound. Large clots may need urgent evacuation but this is again very rare.
- Surgery on incorrect level. This is well recognized in the literature but with use of repeated x-rays and review by surgeon and assistant surgeon during surgery, this risk is minimized.
- Risk of CSF leak (<1%)
- Suboptimal position of screws