

Anterior Cervical Spine Surgery

- Large Anterior Cervical Spine Schwannoma Causing Dysphagia: Case Report
- Mid-Term Functional Recovery After ACDF and ACCF in the Treatment of Adjacent Two-Level Cervical Spondylosis: A Comparative Study
- Postoperative complications in patients with sickle cell disease undergoing single-level anterior cervical discectomy and fusion
- Application of V-shaped stealth decompression technique using ultrasonic bone scalpel in anterior surgery for adjacent two-level cervical spondylosis
- Anterior transarticular crossing screw fixation for reducible atlantoaxial dislocation with basilar invagination: a radiological feasibility study
- Impact of anterior controllable antedisplacement and fusion (ACAF) on cervical lordosis and sagittal alignment in OPLL: A comparative radiographic analysis
- Intraoperative Conversion of Primary Cervical Total Disc Replacement to Fusion: Incidence and Reasons
- Twenty-One-Year Experience With Cervical Diagnostic Blocks and Denervation: A Study of 1031 Cases at a Single Institution

Types

Anterior Cervical Discectomy

Cervical total disc replacement

Outcome

Quality of life (QoL) has been identified as one of the most important outcome measurements following cervical spine surgery. The contributing factors to post-operative QoL remain limited.

A study of Yang et al. aimed to prospectively examine the QoL and related pre-operative emotional factors in patients who underwent anterior cervical spine surgery.

A total of 124 patients who underwent anterior cervical spine surgery were recruited. All participants were prospectively evaluated for their QoL and 2 aspects of emotion, depression and anxiety, before and after surgery, respectively.

Pre-operatively, 13% of patients showed signs of depression and 31% of patients reported symptoms of anxiety. Post-operatively 14% of patients reported depression, but 41% reported symptoms of anxiety. A significant association between depression, anxiety and different domains of QoL were identified, and specific cut-off points of pre-operatively depressive and/or anxiety levels to predict unfavorable postoperative QoL was further established.

This prospective study demonstrated specific emotional factors, specifically depression and anxiety, influence patients' QoL following surgery. These results suggest clinicians should also monitor patients' emotional adjustments with their physical conditions ¹⁾.

Complications

Anterior Cervical Spine Surgery Complications

Is one of the most common [complications](#) following anterior cervical spine surgery (ACSS).

A review and summarize recent literature in order to provide a general overview of clinical signs and symptoms, assessment, incidence and natural history, pathophysiology, risk factors, treatment, prevention, and topics for future research.

A search of English literature regarding dysphagia following anterior cervical spine surgery was conducted using PubMed and Google Scholar. The search was focused on articles published since the last review on this topic was published in 2005.

Patients who develop dysphagia after ACSS show significant alterations in swallowing biomechanics. Patient history, physical examination, X-ray, direct or indirect laryngoscopy, and videoradiographic swallow evaluation are considered the primary modalities for evaluating oropharyngeal dysphagia. There is no universally accepted objective instrument for assessing dysphagia after ACSS, but the most widely used instrument is the [Bazaz Dysphagia Score](#). Because dysphagia is a subjective sensation, patient-reported instruments appear to be more clinically relevant and more effective in identifying dysfunction. The causes of oropharyngeal dysphagia after ACSS are multifactorial, involving neuronal, muscular, and mucosal structures. The condition is usually transient, most often beginning in the immediate postoperative period but sometimes beginning more than 1 month after surgery. The incidence of dysphagia within one week after ACSS varies from 1 to 79% in the literature. This wide variance can be attributed to variations in surgical techniques, extent of surgery, and size of the implant used, as well as variations in definitions and measurements of dysphagia, time intervals of postoperative evaluations, and relatively small sample sizes used in published studies. The factors most commonly associated with an increased risk of oropharyngeal dysphagia after ACSS are: more levels operated, female gender, increased operative time, and older age (usually >60 years). Dysphagic patients can learn compensatory strategies for the safe and effective passage of bolus material. Certain intraoperative and postoperative techniques may decrease the incidence and/or severity of oropharyngeal dysphagia after ACSS.

Large, prospective, randomized studies are required to confirm the incidence, prevalence, etiology, mechanisms, long-term natural history, and risk factors for the development of dysphagia after ACSS, as well as to identify prevention measures. Also needed is a universal outcome measurement that is specific, reliable and valid, would include global, functional, psychosocial, and physical domains, and would facilitate comparisons among studies. Results of these studies can lead to improvements in surgical techniques and/or perioperative management, and may reduce the incidence of dysphagia after ACSS ²⁾.

References

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