Global Science Research Journals

Global Journal of Neurology and Neurosurgery

Open Access

Analysis of complications related to anterior approach to cervical spine

Ali Niyaf, Chandra Prakash Limbu, Ram Kumar Shrestha, Ibrahim Moomin, Abdulla Ubaid

Department of Neurosurgery, ADK Hospital, Department of Surgery, ADK Hospital

Abstract

Smith and Robinson anterior approach popularized in 1968 is a well-established surgical procedure. It is one of the most regularly performed spine approach. Following numerous modifications in refining this innovative technique, it is considered as an efficient and safe technique. Anterior cervical approaches allow surgical correction of variety of spine pathologies. Nevertheless, the incidence of complications should not be disregarded. Although infrequent, these complications must be addressed in order to devise corrective measures.

The aim of the study was to assess the occurrence of complications post-operatively following anterior cervical spine procedure.

A total of 91 patients who underwent anterior cervical procedures from 2016- September 2018 were included in our retrospective study. Pathologies for which procedures were performed included cervical radiculopathy and myelopathy due to degenerative disc disease, spinal cord injury or listhesis due to trauma. Some infrequent cases were also encountered such as anterior cervical epidural hematoma, traumatic type II odontoid fractures, ossified posterior longitudinal ligament.

All our patients who underwent surgical treatment medical records were analyzed and complications were recorded. The most commonly performed procedure (92.3%) was anterior cervical discectomy and fusion (ACDF). Three (3) patients (3.3%) underwent anterior cervical corpectomy and interbody fusion (ACCF). Three (3.3 %) undertook ACDF without plating and one (1.1%) anterior odontoid screw fixation.

Follow-up interval ranged from 3-12 months. The overall complication rate was 21%. We encountered adjacent level disease in 3.3% of our cases, dysphagia in 2.2%, postoperative hematoma formation with deep surgical site infection occurred in 1.1%, no dura mater injury or cerebrospinal fluid leak was noticed. Additionally, esophageal perforation or deterioration of myelopathy was not encountered in our series. Symptomatic recurrent laryngeal nerve palsy seen in 4.4% with permanent involvement in one case. Fusion failure was identified in 2.2%. Majority of anterior cervical spine complications were inconsequential, hence required no additional treatment. Early identification and timely management, is paramount in order to achieve satisfactory surgical outcome.

Biography

Ali Niyaf is a graduate of Tribhuvan University of Nepal with Magister Chirurgiae (MCh) in Neurosurgery, and has undergone training programmes in Brazil and in the United Sates of America. Dr. Ali Niyaf has been working as a Neurosurgeon since 2014, and was selected as a Silver Perfomer of ADK Hospital in 2015. His special interests include craniovertebral junction pathologies, spine degeneration, minimally invasive spine surgeries and neuroendoscopic surgeries.

5th International Conference on Brain and Spine | July 27, 2020

Citation: Ali Niyaf, Analysis of complications related to anterior approach to cervical spine, Brain and Spine 2020, 5th International Conference on Brain and Spine, July 27, 2020, Page 09