Incidence and Risk Factors for Post Operative Dysphagia in Anterior Cervical Discectomy and Fusion

Anterior cervical discectomy and fusion (ACDF) is a commonly performed procedure for patients with cervical degenerative disc disorder. Despite many studies analyzing post-operative dysphagia, there exists a highly variable range in incidence of dysphagia, some literature reporting as high as 71%. The aim of the current retrospective, single center cohort study was to determine if dysphagia is still a common post-operative complication.

Patients undergoing single or multi-level ACDF seen at Gerling Institute between 2020 and 2022 were identified. Patient demographics including age, gender, ASA grade, Body Mass Index (BMI) and smoking status were collected. Risk factors measured included, number of levels performed, primary/revision surgery, insurance type, smoking status, epidural steroid injection (ESI) use, plate type, and intraoperative steroid use. Rates of dysphagia were obtained postoperatively at 2 weeks and again at an interval between 3 weeks to 3 months. Regression models and analyses were used to determine whether risk factors were independent predictors of dysphagia.

A total of 640 patients undergoing ACDF were identified. At the two weeks postoperative mark, new onset dysphagia was observed in 1.1% of the sample, and new onset dysphagia occurring up to 3 months post operatively was seen in 1% of patients. One patient had persistent dysphagia over these two time periods. There were no statistically significant differences in patients who presented with new onset dysphagia compared to those who did not in risk factors that were assessed, at both 2 weeks and 3 weeks to 3 months' time points. When controlling for age and gender, there were no statistically significant associations between risk factors and postoperative dysphagia.

This analysis delineated low incidence rates of new onset dysphagia following ACDF, with no common risk factors showing an increased risk of complication.