

# Steroids Reduce Post-operative Dysphagia Following Anterior Cervical Spine Surgery: A Systematic Review

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## Learning Objectives

By the end of this presentation, members should be able to:

- 1) Describe the potential benefit of steroids for post-operative dysphagia after anterior cervical spine surgery
- 2) Discuss the potential complications
- 3) identify requirements of future studies to further confirm these findings

## Introduction

Dysphagia following anterior cervical spine surgery is common. Steroids potentially reduce post-operative inflammation that leads to dysphagia; however, the efficacy, optimal dose and route of steroid administration have not been fully elucidated. The purpose of this systematic review is to evaluate the effect of peri-operative steroids on the incidence and severity of dysphagia following anterior cervical spine surgery.

## Methods

A PubMed search adherent to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines was performed to include clinical studies reporting use of steroids in adult patients following anterior cervical spine surgery. Data regarding steroid dose, route and timing of administration were abstracted. Incidence and severity of post-operative dysphagia were pooled across studies.

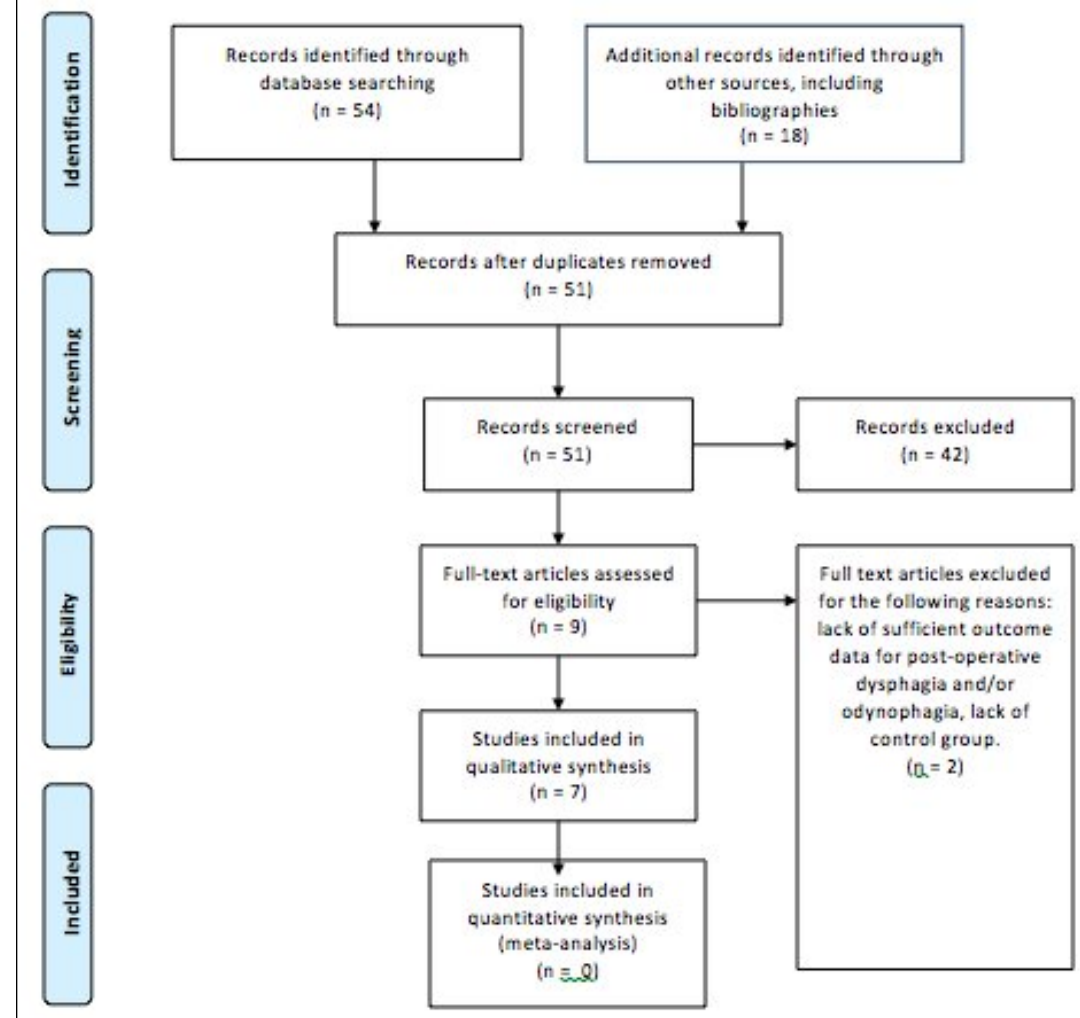
## Results

Seven of 72 screened articles met inclusion criteria for a total of 246,298 patients that received steroids. Patients that received systemic and local steroids had significant reductions in rate and severity of dysphagia post-operatively. Reduction of dysphagia severity was more pronounced in patients undergoing multilevel procedures in both groups. There was no difference in infectious complications among patients that received steroids compared with controls. There was no difference in fusion rates at long-term follow-up.

## Conclusions

Steroids may reduce dysphagia after anterior cervical spinal procedures in the early post-operative period without increasing complications. This may be especially beneficial in patients undergoing multilevel procedures. Future studies should further define the optimal dose and route of steroid administration, and the specific contraindications for use.

## PRISMA flow diagram for systematic reviews



## References

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