A Multidisciplinary Spine Surgical Indications Conference Leads to Alterations in Surgical Plans in a Significant Number of Cases: An Observational Pilot Study

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Disclosures

• Nothing to disclose
Introduction

- Determining the optimal spine procedure for patients can often be difficult
- Multidisciplinary Methods Reduce Variability and Overutilization
- Previous research demonstrates multidisciplinary conferences can reduce utilization of lumbar spinal fusion.¹

Purpose

- To evaluate the impact of a weekly spine surgery indications conference on surgical planning for elective spine surgeries.
Each week, all cases for the following week are reviewed by the three neurosurgery and three orthopaedic spine specialists.

The attending surgeons did not review the other surgeons’ cases prior to the meeting.

The group reviews the patient’s history, physical exam, and relevant spine imaging.

Group discusses the proposed surgery.

A consensus treatment decision is reached by the group to approve or modify the proposed surgery.
Methods

- Included all consecutive patients presented at the conference from September 2019 to December 2019
- Initial surgical recommendations and subsequent group consensus for each case were documented
- Recorded invasiveness index\(^1\) of proposed surgery and recommended invasiveness for cases recommended for alteration
- Reviewed the patient records and extracted data from our electronic medical record

Methods

- Analyzed number of cases recommended for alteration by the conference.
- Measured absolute change in invasiveness for altered procedures.
- Determined surgeon compliance rates with the conference’s recommendations.
Results – Change in Invasiveness for altered cases

- 19 (19%) altered cases in overall (binomial test, p<0.001)
- The group suggested alterations that increased the surgery’s invasiveness for six cases (31.6%)
- Decreased the level of invasiveness in 10 cases (52.6%)
- Maintained the same level of invasiveness in the other 3 cases (15.8%).
- Participants complied with the conference’s recommendations in 96.5% of cases.
Results – Change in Invasiveness for altered cases

- Median absolute value of the change in invasiveness for the altered cases was 3 (Interquartile Range [IQR] 1-4)
  - Minimum change of 0 and a maximum change of 15.
- For increased invasiveness cases median increase of 2.5 points (IQR 2 - 3.75) (p=0.036)
- For decreased invasiveness cases median decrease of 3 points (IQR 2.25 - 4.75) (p=0.006).
Conclusions

• A spine surgery indications conference leads to changes in a significant number of cases (19%).
• These changes alter the planned invasiveness of these procedures.
• This did not correlate with surgeon experience (number of years in practice) or field (orthopaedic surgery or neurosurgery).
• Compliance with the conference’s recommendations was high (96.5%).