

Abstract #639.docx

CURRENT USE OF PATIENT-REPORTED OUTCOME INSTRUMENTS IN DEGENERATIVE CERVICAL SPINE SURGERY

Introduction/ Aim

There is currently no agreement as to what patient reported outcome instruments (PROI) should be used for cervical spine diseases. The purpose of this study was to determine the frequency and distribution of various PROIs used in the degenerative cervical spine surgery literature, and to identify trends of the usage of these instruments over the past decade.

Materials and Methods

A search was conducted via PubMed from 2004-2013 on five journals (The Journal of Bone and Joint Surgery, The Bone and Joint Journal, The Spine Journal, The European Spine Journal, and Spine). All journal abstracts were screened and articles addressing degenerative cervical spine surgery using PROIs were included. Articles were then analyzed for publication date, study design, journal, level of evidence, and PROI trends. Prevalence of outcome instruments and level of evidence of included articles were analyzed.

Results

From 19,736 articles published, 241 articles fulfilled our study criteria. Overall, there were 53 distinct outcome measures utilized. The top seven most frequently used outcome measures were: Japanese Orthopaedic Association score (104 studies, 43.2%), visual analog scale for pain (100 studies, 41.5%), Neck Disability Index (72 studies, 29.9%), SF-36 (38 studies, 15.8%), Nurick Score (25 studies, 10.4%), Odom's criteria (21 studies, 8.7%), Oswestry Disability Index (15 studies, 6.2%). Only 11 PROIs were used in more than 5 articles, and 33 PROIs were found to be used only once. Among all of the included articles, 32% were level IV evidence, but there were 16% of level I evidence articles. The increasing trend of the use of PROIs was found along with the year going by.

Discussion

PROIs are important tool to objectively compare and evaluate the efficacy of treatment strategies for cervical spinal diseases. However, there is no established consensus as to which instruments should be used.

Conclusion

The vast usage of PROIs in degenerative cervical spine surgery field was reported. A consensus on which instruments to be used for a given diagnosis or procedure may be necessary for better communication and comparison, as well as for the accumulation and analysis of vast clinical data across multiple studies.