

The Impact of Reporting Standard Guidelines on Publications of Vestibular Schwannomas Treated with Microsurgical Resection

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Introduction

In 2003, Kanzaki and colleagues published a set of reporting standards for vestibular schwannoma (VS) to serve as a guide for future publications. Here, the current published body of literature on VS cases treated with microsurgery was reviewed to determine its degree of adherence to the reporting systems since the publication of the reporting standards.

Methods

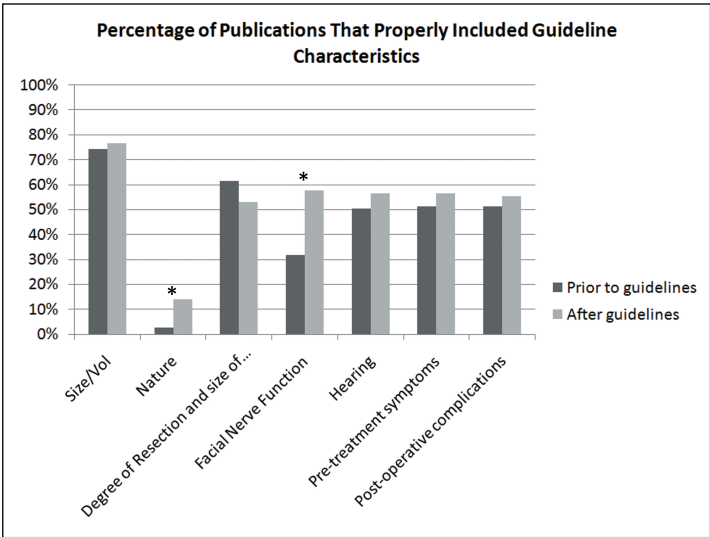
A comprehensive search of the English language literature was performed to identify studies reporting outcome data obtained in patients who underwent microsurgical resection for VSs. The studies were grouped based on their publication date, and whether they were published prior to or after the reporting standards. Each publication was reviewed to determine whether it had properly reported each of 7 items relevant to surgical management described in the Consensus Meeting reporting guidelines. The number of studies that had included each of the key items prior to and after the publication of the reporting guidelines was compared.

Consensus Meeting on Systems for Reporting Results in Acoustic Neuroma Items to be included in each publication:

- 1) measured size of the tumor
- 2) cystic nature of the tumor
- 3) extent of resection achieved
- 4) facial nerve function
- 5) hearing function
- 6) preoperative symptoms
- 7) postoperative complications.

Results

The literature review revealed a total of 303 studies representing 55,690 cases of VS. There were 218 studies including 37,329 cases that were published prior to the Consensus reporting guidelines, and 85 studies with a total of 18,361 cases published after the reporting standards. After the publication of the standards, there were a significantly greater proportion of studies that properly reported the nature of the tumor and facial nerve function. Since the publication of the Consensus Meeting Guidelines, there were also trends towards greater proportions of articles that properly reported the size, hearing function, pre-operative symptoms, and post-operative complications of the patients treated. The Guideline factors that had the largest absolute increase in adherence after its release were the facial nerve and hearing functions.



Conclusions

Since the release of the reporting system guidelines for VS, the focus of the publications appears to have shifted away from basic clinical characteristics and towards post-treatment neurologic function. The shift may have been in part driven by the evolving interests of the community of academic neurosurgery and otolaryngology. However, even publications solely focusing on complications and functional outcomes must keep the data in context of the basic essential set of clinical characteristics, in order to facilitate comparison of outcomes across institutions. Future studies reporting the clinical characteristics and surgical outcomes for patients with VS cases should strive to include all the elements described in the Consensus Meeting guidelines.

Learning Objectives

- 1) Describe the items included in the reporting standard guidelines published by the Consensus Meeting on Systems for Reporting Results in Acoustic Neuroma.
- 2) Discuss the potential impact of reporting standards on the literature reporting outcomes of vestibular schwannoma treated with microsurgery
- 3) Discuss the benefits of adhering to reporting standards when reporting outcomes after surgical treatment of vestibular schwannoma.
- 4) Develop a greater awareness for evolving areas of focus and interest for a given pathology over time.

References

Kanzaki J, Tos M, Sanna M, Moffat DA. New and Modified Reporting Systems from the Consensus Meeting on Systems for Reporting Results in Vestibular Schwannoma. Otology and Neurotology. 24:642-649, 2003.