TARGET POPULATION: Adults with histologically proven or suspected vestibular schwannomas with neurofibromatosis type 2 (NF2).

QUESTION: What is the role of bevacizumab in the treatment of patients with vestibular schwannomas?

RECOMMENDATIONS: Level 3: It is recommended that bevacizumab be administered in order to radiographically reduce the size or prolong tumor stability in patients with NF2 without surgical options. Level 3: It is recommended that bevacizumab be administered to improve hearing or prolong time to hearing loss in patients with NF2 without surgical options.

QUESTION: Is there a role for lapatinib, erlotinib, or everolimus in the treatment of patients with vestibular schwannomas?

RECOMMENDATIONS: Level 3: Lapatinib may be considered for use in reducing vestibular schwannoma size and improvement in hearing in NF2. Level 3: Erlotinib is not recommended for use in reducing vestibular schwannoma size or improvement in hearing in patients with NF2. Level 3: Everolimus is not recommended for use in reducing vestibular schwannoma size or improvement in hearing in NF2.

QUESTION: What is the role of aspirin, to augment inflammatory response, in the treatment of patients with vestibular schwannomas?

TARGET POPULATION: Any patient with a vestibular schwannoma undergoing observation.

RECOMMENDATION: Level 3: It is recommended that aspirin administration may be considered for use in patients undergoing observation of their vestibular schwannomas.

QUESTION: Is there a role for treatment of vasospasm, ie, nimodipine or hydroxyethyl starch, perioperatively to improve facial nerve outcomes in patients with vestibular schwannomas?

TARGET POPULATION: Adults with histologically proven or suspected vestibular schwannomas.

RECOMMENDATION: Level 3: Perioperative treatment with nimodipine (or with the addition of
hydroxyethyl starch) should be considered to improve postoperative facial nerve outcomes and may improve hearing outcomes.

**QUESTION:** Is there a role for preoperative vestibular rehab or vestibular ablation with gentamicin for patients surgically treated for vestibular schwannomas?

**TARGET POPULATION:** Adults with histologically proven or suspected vestibular schwannomas.

**RECOMMENDATIONS:** Level 3: Preoperative vestibular rehabilitation is recommended to aid in postoperative mobility after vestibular schwannoma surgery. Level 3: Preoperative gentamicin ablation of the vestibular apparatus should be considered to improve postoperative mobility after vestibular schwannoma surgery.

**QUESTION:** Does endoscopic assistance make a difference in resection or outcomes in patients with vestibular schwannomas?

**TARGET POPULATION:** Vestibular schwannoma patients, who are surgical candidates. Inclusion in this analysis required resection utilizing the endoscope, either as the primary operative visualization or microscopic assistance with more than 20 patients treated.

**RECOMMENDATION:** Level 3: Endoscopic assistance is a surgical technique that the surgeon may choose to use in order to aid in visualization. The full guideline can be found at: https://www.cns.org/guidelines/guidelines-management-patients-vestibular-schwannoma/chapter_9.

**KEYWORDS:** Acoustic neuroma; Emerging therapies; Endoscope; Novel drug therapies; Vestibular schwannoma

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