

Chapter 281

Quality of life in patients with vestibular Schwannoma - A literature review

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ABSTRACT

Although Vestibular Schwannomas (SV) are benign tumors, they can cause symptoms such as hearing loss, tinnitus, balance disorders, etc. Such manifestations reduce the quality of life (QOL), in such a way that patients with VS report worse QOL than patients with chronic diseases or head and neck cancer. As VS is not a life-threatening disease if properly treated, most patients will live with their tumor, associated symptoms, and/or sequelae of therapy for long periods.

Keywords: Acoustic Neuroma, Quality of life, Vestibular Schwannoma.

1 INTRODUCTION

Vestibular Schwannomas are a type of benign neoplasm, with a slow growth character, originated in the neuroglia by Schwann cells in the peripheral nervous system, affecting the VIII pair of cranial nerve (vestibulocochlear) and are responsible for 90% of cerebellar-pontine lesions in the brain. These tumors have an incidence of 34 SVs/million/year and their main symptoms are usually asymmetrical hearing loss, tinnitus, alteration in balance, and nausea. In addition to these symptoms, headache, facial paresthesia, and facial paralysis may occur. There are multiple treatment choices, with the following three branches: active monitoring, radiotherapy, and surgery. The quality of life of patients affected by VS depends on the therapeutic form best indicated for the case, in addition to the patient's response to the tumor, being a couple of factors that will indicate a gain or loss in each case.

2 METHODOLOGY

Literature review in the BVS (Virtual Health Library) and PUBMED (NCBI Literature Resources) database using the descriptors taken from DeCS/MeSH (Health Sciences Descriptors) “Neuroma, Acoustic” and “Quality of Life”, using the Boolean operator “AND”. The inclusion criteria include five complete texts that address the theme and objective of the work, written in English, with the type of study Systematic review and published between 2017 and 2022.

3 LITERATURE REVIEW

Through the systematic review of the 5 texts that deal with the subject in question, it was possible to infer that lack of energy, anxiety, headache, and problems related to balance are the strongest predictors of physical and mental QoL of the SF-QoL Quality of Life Questionnaire. 36 in patients with VS. Furthermore, it was also possible to conclude that in patients affected by this disease, the white matter showed extensive damage, which was related to the decline in cognitive function, attention, memory, and executive function, affecting the daily and working life of the patients, so that in In a study carried out with 239 patients, the proportion of people with absenteeism was 8%, resulting in a 4% reduction in working hours, and presenteeism was reported by 14% of patients, resulting in a 2% reduction in working hours. The average working hours per week was 36 and, since diagnosis, these hours have been reduced by 6%, with no significant differences between treatment modalities. This data is in line with the information found in a study that compared the QoL in patients with small VS treated by microsurgery, radiotherapy, or observation and concluded that the patients had a similar quality of life, regardless of the management.

REFERENCES

- PRUIJN, I. M. J., *et al.* What determines the quality of life in patients with vestibular schwannoma? **Clinical Otolaryngology**, Volume 46(2), Páginas 412-420, ISSN 1749-4486. 2020. Disponible em: < <https://doi.org/10.1111/coa.13691>>.
- NEVE, O.M., Jansen, J.C., van der Mey, A.G.L. *et al.* The impact of vestibular schwannoma and its management on employment. **Eur Arch Otorhinolaryngol**, Volume 279(6), Páginas 2819–2826, ISSN 1434-4726. 2021. Disponible em: < <https://doi.org/10.1007/s00405-021-06977-1>>.
- ROSAHL, S., *et al.* Diagnostics and therapy of vestibular schwannomas – an interdisciplinary challenge. **GMS Current Topics in Otorhinolaryngology-Head and Neck Surgery**, Volume 16:Doc03, ISSN 1865-1011. 2017. Disponible em: <<https://doi.org/10.3205%2Fcto000142>> .
- DEBERGE, S., *et al.* Quality of life in the management of small vestibular schwannomas: Observation, radiotherapy and microsurgery. **Clinical Otolaryngology**, Volume 43(6), Páginas 1478-1486, ISSN 1749-4486. 2018. Disponible em: < <https://doi.org/10.1111/coa.13203>>.
- DENG, X., *et al.* Research on the Mechanism of Cognitive Decline in Patients With Acoustic Neuroma. **Frontiers in Neuroscience**, Volume 16: 933825, ISSN 1662-453X. 2022. Disponible em <<https://doi.org/10.3389/fnins.2022.933825>>.