

The role of omohyoid muscle entrapment of the internal jugular vein and its surgical transection in Ménière's disease and other inner ear disorders

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Background

Compressions of the internal jugular vein (IJV) by the omohyoid muscle (OM) in CCSVI has been reported, as well as their treatment with surgical transection in Multiple sclerosis¹ and intracranial hypertension patients² and physical therapy in a Ménière's disease (MD) patient.³ We wanted to evaluate the role and the result of the OM surgical transection in a group of patients with MD and other inner ear disorders.

Methods

Between November 2017 and March 2019, 10 patients with inner ear pathology and CCSVI in part due to OM compression on the IJV have been treated at our department. 8 patients had MD and 2 other inner ear symptoms. In 6 MD patients the OM transection was associated to endolymphatic sac decompression (Sac-Vein Type) and endolymphatic duct coagulation and transection and in 2 with profound hearing loss on the affected ear with endolymphatic sac decompression (Sac-Vein Type), posterior labyrinthectomy and cochlear implantation. In the two non MD patients, a simple OM surgical transection was performed.

Results

All the MD patients got free of vertigo attacks and two of them had an improvement in the CCSVI severity level. Of the two patients with non MD otologic disorders only one had a persistent improvement, the second non-MD patient had only a temporary improvement.

No surgical complications occurred in our patients.

Conclusions

We propose a new way of treatment in patients with MD and other inner ear pathologies associated with CCSVI, when part of the IJV obstruction is due to OM compression of the IJV. This surgical strategy has permitted a simultaneous cure of the typical MD symptoms and partially, of the CCSVI related ones. A simple surgical procedure as the OM transection may have an important role in patients with CCSVI,

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CCSVI related pathologies, MD and other inner ear disorders.

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