

LETTER TO THE EDITOR

Response to: “Transmeatal microsurgery for intralabyrinthine and intrameatal schwannomas: literature review”

Lettera in risposta a: “Approccio transmeatale microchirurgico nei neurinomi intralabirintici e intrameatali: revisione della letteratura”

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PAROLE CHIAVE: *microchirurgia, schwannoma vestibolare, approccio transmeatale, condotto uditivo interno*

Dear Editor,

We appreciated the comments by Marchioni and colleagues on our recent paper: *Transmeatal microsurgery for intralabyrinthine and intrameatal schwannomas: a reappraisal*¹. Productive debates generally lead towards improvement, giving the opportunity to clarify key aspects.

We pointed out, not because we “apparently ignore”, that the *transmeatal* microscopic approach (TMMa) to the internal auditory canal (IAC) dated to the seventies. It was a remarkable achievement as, to the best of our knowledge, it was the first mentioned microscopic route from the external auditory canal to the IAC² and supported by extensive case material. No comments on indications, drawbacks or limits of this surgical corridor were intentionally added to our paper, since they would have sounded anachronistic. Similarly, we did recognize the contribution^{3,4} that the Modena-Bologna and Verona groups have made to the approach to the IAC for vestibular schwannomas removal. The focus of our study was neither on the “Endoscopic Transcanal Transpromontorial approach”, nor on the “Expanded Transcanal Transpromontorial approach”, directed to larger tumours in the cerebellopontine angle (CPA). Our contribution aimed to report on the surgical route to the IAC with the microscope through the external auditory canal for intralabyrinthine and/or intracanalicular tumours, the same target of the transcanal endoscopic approach³, but with little differences. When compared to the latter, TMMa does not require removal of the external auditory canal to make space for instruments, the tympanic membrane is preserved in its anatomic position and the ear contour of the external ear is completely maintained, thus avoiding the aesthetic morbidity inherent to the canal sacrifice and suture. The two-hands microsurgical technique allowed safe handling of structures, while the endoscope improved magnification of surgical details and provided good iconographic material.

The further *expanded* extension⁴ of the transcanal transpromontorial approach⁴, was intentionally – and not “surprisingly” – *not* included in our study, because it was beyond the scope of our paper. Such extensive transcanal drilling of the tympanic bone, including the exposure of the internal carotid artery and the

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Conflict of interest

The Authors declare no conflict of interest.

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jugular bulb, corresponds in the end to a pre-facial lateral petrosectomy (adding retroauricular incision, fat obliteration and *cul-de-sac* closure of the external auditory canal). Nevertheless, since it was mentioned in the letter, we take hereby the opportunity to raise some issues. The Koos III tumour as shown in that paper⁴ does not correspond to a 3 cm tumor as stated by the authors, but to a 1.2 -1.3 cm tumour. On the other hand, a plain translabyrinthine approach to such “Koos III” CPA tumours is, in our opinion, still preferable over the expanded transcanal transpromontorial approach. No further extensive drilling is required to expose the internal carotid artery and jugular bulb in the temporal bone, the external auditory canal is preserved and not closed, the neurovascular structures in the CPA are safely handled, and the cochlea is maintained in view of a possible cochlear implant.

We hope to have answered to the issues raised by Marchioni et al., and we are pleased that a discussion has been started on a topic that benefited from their original and

valuable contributions. A different surgical perspective on some already published scientific reports is not intended to disclaim the preceding experiences but, on the contrary, to offer a different point of view, where agreement or disagreement may – of course – always follow.

References

- ¹ Mazzoni A, Zanoletti E, Cazzador D, et al. Transmeatal microsurgery for intralabyrinthine and intrameatal schwannomas: a reappraisal. *Acta Otorhinolaryngol Ital* 2020;40:390-395. <https://doi.org/10.14639/0392-100X-N0779>
- ² Alvarez De Cozar F, Antoli-Candela F. Chirurgie transvestibulaire. *Rev Laryngol Otol Rhinol* 1970;91:927-935.
- ³ Marchioni D, Alicandri-Ciufelli M, Rubini A, et al. Endoscopic transcanal corridors to the lateral skull base: Initial experiences. *Laryngoscope* 2015;125(Suppl 5):S1-13. <https://doi.org/10.1002/lary.25203>
- ⁴ Marchioni D, Soloperto D, Masotto D, et al. Transcanal transpromontorial acoustic neuroma surgery. Results and facial nerve outcomes. *Otol Neurotol* 2018;39:242-249. <https://doi.org/10.1097/MAO.0000000000001658>