



## Chondrosarcoma of the jugular foramen

**Authors:** Josip Prnjak<sup>1</sup>, Lorena Dolački<sup>1</sup>, Jakov Ajduk, MD, PHD<sup>1,2</sup> (mentor)

<sup>1</sup> University of Zagreb, School of Medicine, Croatia

<sup>2</sup> Department of Otorhinolaryngology and Head and Neck Surgery, University Hospital Center Sestre milosrdnice, Zagreb, Croatia

### Background:

Chondrosarcomas of the skull are locally aggressive malignant tumors that account for 0.15% of all intracranial neoplasms. Around three fourths of these lesions are located at the skull base. Primary chondrosarcomas of the jugular foramen are exceptionally rare, with only 11 documented cases in the medical literature.

### Case presentation:

A 65-year-old male presented with the pain and congestion in the right ear and a facial nerve paresis along with decreased hearing and pulsations on the left side. His physical exam showed a perforation of the right eardrum in the lower quadrants, and on the left side, protrusion of the posterior quadrants along with dried blood. Left facial nerve paresis (HB III/VI) was also present. Otomicroscopy was done on the left side with myringotomy and placement of the ventilation tube. MSCT of the middle ear and the temporal bone revealed a lobulated mass on the left side that has filled out the jugular fossa, invaded the mastoid and the hypotympanum. Lesion has also destroyed the petrous part of the temporal bone and eroded the wall of the carotid canal. Left facial nerve canal was infiltrated and there was an absence of blood flow in the left sigmoid sinus and the internal jugular vein

Since the tumor araised primarily from the jugular foramen, the treatment plan centered on surgery through an Fisch infratemporal fossa approach type A.

Pathology report was consistent with a moderately well differentiated chondrosarcoma. Patient recovered well. Interestingly, as opposed to the other cases of the primary jugular foramen CSA, our patient first presented with a facial nerve paresis even before having any symptoms of conductive hearing loss.

### Conclusion:

The goal of treatment for well differentiated jugular foramen CSAs is total surgical removal that can be achieved through an infratemporal fossa approach type A.

### Keywords:

Chondrosarcoma, jugular foramen