

Skull base surgery

The term "skull base surgery" is generally used to describe surgical procedures in the anterior, middle or posterior skull base. This kind of surgery is normally employed to treat various benign or malignant tumors. We place great importance in this context on creating an access tailor-made for the individual patient; the procedure should be as minimally invasive – and at the same time as radical – as possible. In individual cases, however, only incomplete resection can be performed because of the risk of neurological deficits posed by complete resection. In such cases surgery is combined with special radiation treatment, e.g. stereotactic fractionated irradiation.

In many cases, an interdisciplinary approach is necessary for the operation. There is excellent collaboration between our department and the Department of Otorhinolaryngology at St. Anna's Hospital run by the Maltese Cross in Duisburg-Huckingen and the departments of maxillofacial surgery at the University of Duisburg-Essen and Ruhr University Bochum. Moreover, because of the importance of monitoring the functions of the cranial nerves (e.g. the facial nerve) during the treatment, we have equipment for such monitoring at our department.

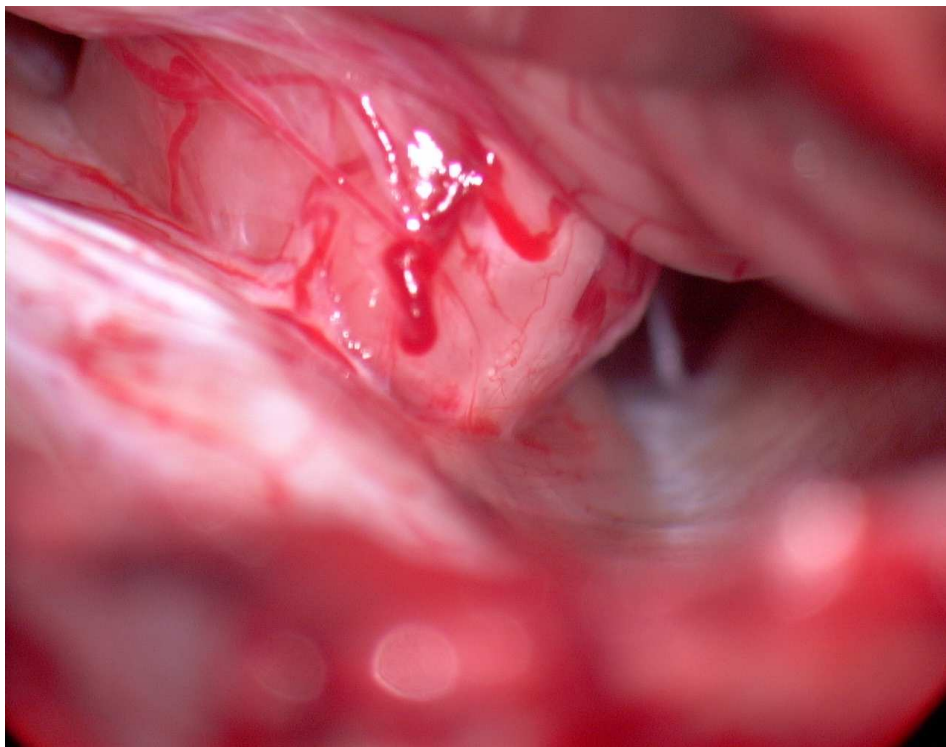


Fig.: Acoustic neuroma (also called a "vestibular schwannoma") at the exit of the internal acoustic pore – the internal auditory canal.

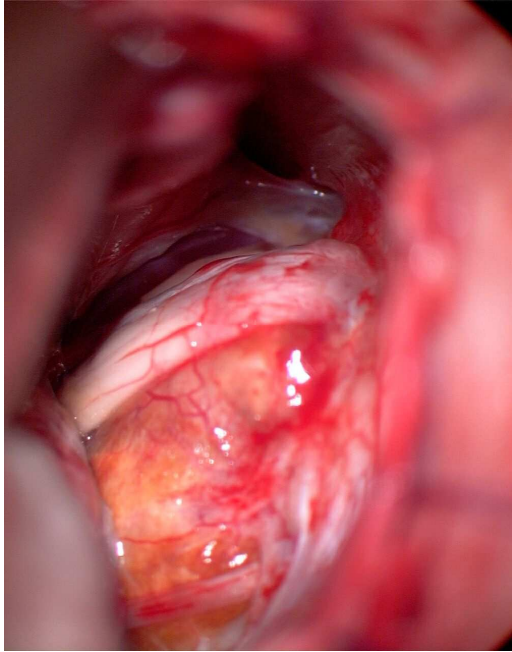


Fig.: A cholesterol granuloma in the posterior cranial fossa. Nerves VII and VIII have been displaced upwards.

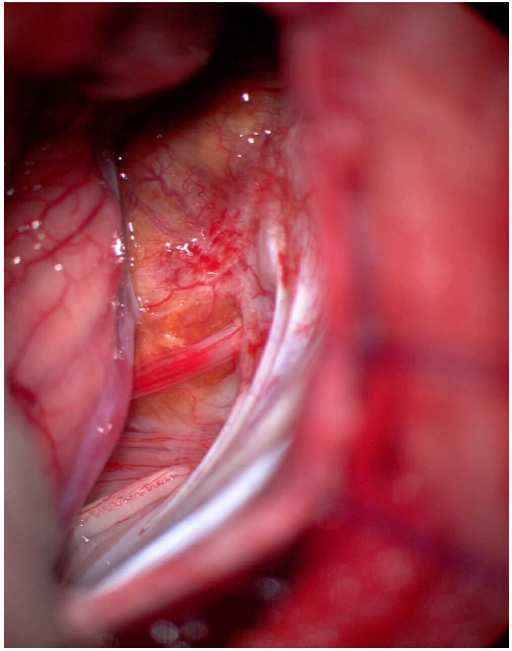


Fig.: A cholesterol granuloma: The caudal nerve group (IX, X) is visible at the lower margin.