Endoscopic Resection of a Cerebellopontine Angle Epidermoid Cyst via a Retrosigmoid Approach

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Abstract

A variety of lesions may arise within the cerebellopontine angle (CPA). Schwannomas and meningiomas are most commonly found in this location; however epidermoid cysts may also be found in this area. Here, we present the case of a 31-year-old man with severe right facial pain. Magnetic resonance imaging (MRI) demonstrated a right CPA mass that had heterogenous intensity on T2-weighted imaging and restricted diffusion on diffusion-weighted imaging. The patient was offered resection of the mass for treatment of his facial pain via an endoscopic retrosigmoid approach. We provide a video that illustrates the steps taken to resect this mass endoscopically. The mass was white and friable. The tumor was resected using a combination of sharp dissection with the microscissors and round knife and aspiration. As the tumor was removed, the 5th nerve was visualized deep to the tumor. The tumor was freed from any adhesions and was resected piecemeal. The round knife was used to free the tumor from surrounding venous structures. The brainstem and origin of the trigeminal nerve were visualized with further tumor debulking. We moved inferiorly to resect the remainder of the tumor. We worked around the surrounding vasculature to resect the tumor. Advancing the endoscope farther, we visualized Meckel's cave. The wound was irrigated and closed in standard fashion. Tissue pathology confirmed a diagnosis of epidermoid cyst. The vast majority of the mass was removed and the patient had resolution of his facial pain postoperatively.

The link to the video can be found at: <https://youtu.be/fSw5sw8xQz0>.

Keywords

- endoscopic
- epidermoid cyst
- cerebellopontine angle
- retrosigmoid

Conflict of Interest
None declared.

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