Endoscopic Excision of A Nasal Glioma

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Citation

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Abstract

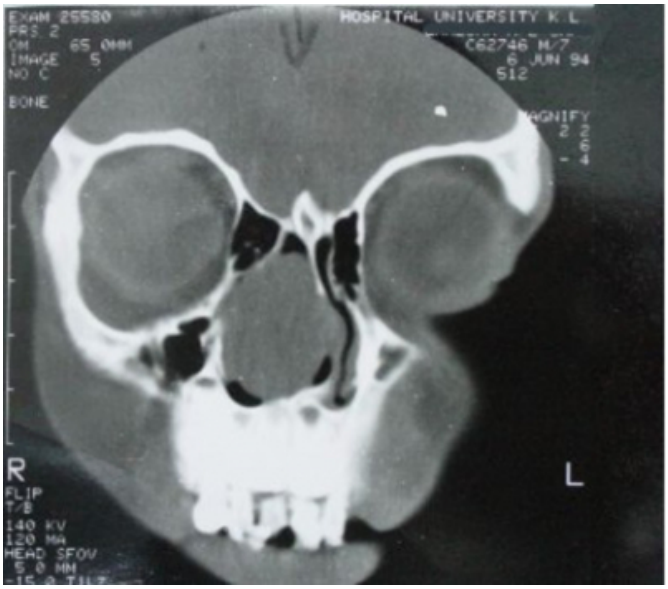
Unilateral nasal mass is a fairly rare presentation in the paediatric age group. The common differential diagnosis include antrochoanal polyps, dermoid cysts, teratomas, encephaloceles and nasal gliomas. A diagnosis is usually obtained with the aid of imaging techniques such as Computed Tomography and Magnetic Resonance Imaging, Nasal gliomas are usually treated by complete excision. We report a case in which the nasal glioma was excised endoscopically.

CASE REPORT

An 8 year old boy was referred to the ENT Department, University Malaya Medical Centre from the School Health Unit with a one year history of right sided nasal obstruction. He complained of difficulty breathing on lying supine which improves on lying prone. There was also a 3 month history of swelling over the nasal bridge. No history epistaxis was noted.

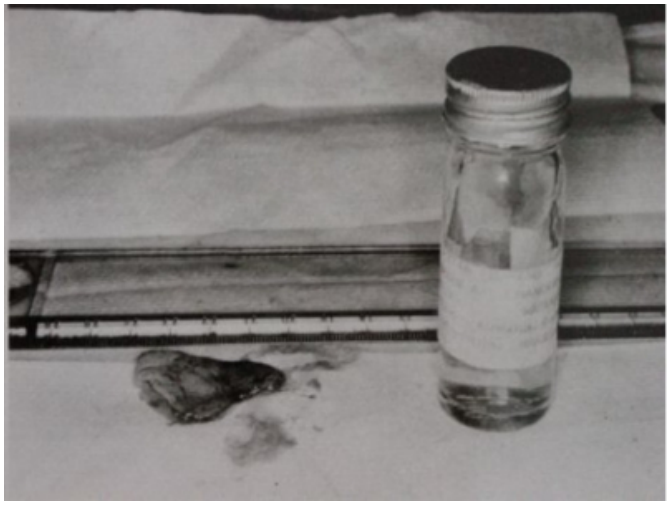
External examination revealed splaying of the nasal bridge. Overlying skin appeared normal. On anterior rhinoscopic examination a large pinkish mass occupying the entire nasal cavity was noted. It was soft, non pulsatile and non tender. Computed Tomography (CT) revealed a well defined soft tissue mass in the right nasal cavity displacing the septum to the left and compressing the lateral wall of the right nasal cavity. There was no bony defect nor any intracranial extension. (Fig 1)

Figure 1



Excision of the mass was performed under general anaesthesia. The nasal cavity was packed with cocaine impregnated ribbon gauze prior to endoscopic excision. It was removed en block endoscopically. The mass measured 4 cm by 2 cm .(Fig 2).

Figure 2



After endoscopic excision the nasal cavity was packed with BIPP gauze which was removed on the second post operative date. The patient was subsequently discharged well on the third postoperative day. The histopathological diagnosis was heterotropic glial tissue consistent with a nasal glioma. Endoscopic examination during the postoperative follow up at one month revealed a normal nasal cavity with no evidence of tumor. The patient was last seen one year after surgery with no evidence of recurrence.

DISCUSSION

Congenital midline nasal masses are rare, occurring in only 2-5 per 100,000 live births. [1] The most common are dermoid cysts, teratoma, encephaloceles, and nasal gliomas. Nasal gliomas are masses of heterotopic brain tissue found outside the cranium and are usually not covered with meninges. However unlike encephaloceles it does not communicate with the intracranial cavity. These tumours can occur outside the nasal cavity (60% of cases), within the nasal cavity (30%), and in both sites (10%) [2] . Our patient had the intranasal type. Although nasal gliomas are benign, they can cause significant local damage and cosmetic deformity by compressing and destroying the nasal cartilage.

The diagnosis of this mass may pose a problem for the clinician as FNAC or an excision biopsy carry a significant risk of meningitis. [3] The availability of CT scan and MRI facilitate the diagnosis of a glioma. However a final diagnosis can only be obtained after complete excision.

The treatment of choice has always been complete excision as this reduces the risk of recurrence. However it is important to note that nasal gliomas are variants of encephaloceles, and are therefore not true neoplasms, and may be removed safely by the endoscopic technique [4] . The endoscopic technique method naturally has an aesthetic advantage. It eliminates the need for a surgical scar. However in unskilled hands, there may be a risk of incomplete excision. Extensive lesions infiltrating into the cranial cavity would need an external approach to obtain a clear surgical margin.

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