NASAL GLIOMA IN 18 MONTH CHILD

*D Kumar, **A Agrawal, ***N Shree, ****C Gupta, *****AP Verma

ABSTRACT

Nasal gliomas are uncommon congenital benign lesions arising from abnormal embryonic development. Clinically, these masses are firm and noncompressible. Proper management of a nasal glioma requires a multidisciplinary approach including an otorhinolaryngologist, radiologist, and neurosurgeon. Radiological investigations such as computed tomography or magnetic resonance imaging should be performed to exclude intracranial extension. The mainstay of treatment is conservative surgical excision because nasal gliomas are slow-growing, rarely recurrent, and have no malignant potential. We report one case of extranasal nasal glioma in 18 months female. She underwent surgical excision with good cosmetic results. Postoperative period result was uneventful.

Key words: nasal glioma, extranasal, benign.

Address of Correspondence:

Dr. Dharmendra Kumar
Prof. & H.O.D., Dept. of ENT
Sarojini Naidu, Medical College
Agra-282002, Uttar Pradesh, India
Phone - +919412157647
E-mail: Dharmendra.snmc@yahoo.co.in

INTRODUCTION

Nasal glioma is rare, benign, congenital mass more accurately referred to as sequestered glial tissue. The nasal glioma first described by Schmidt in 1900. Sixty percent of glioma are extranasal, 30% are intranasal, and 10% are both. Extranasal gliomas appear near the root of the nose. The overlying skin may be discolored or telangiectatic. We described a nasal glioma, located extranasally.

CASE REPORT

An 18 month old female child presented to E.N.T. outpatient department of Sarojini Naidu Medical College, Agra, India with chief complaint of swelling left side of nose since birth, which had gradually increased in size since birth. She had not suffered pain or nose bleeds. There was no history of nasal obstruction or epistaxis. She was a full-term child. There was no other relevant history. Physical evaluation revealed that the subcutaneous swelling was 2x1 cm in size, at the root of nose just slightly left of the midline. It was not tender, non-mobile, and non-pulsatile, overlying skin is normal. Anterior rhinoscopy was normal and there was no mass inside the nose. The mass did not increase in size when the child cried and on coughing. Other systemic examinations were unremarkable. Her CT scan was done and it showed smooth outline soft tissue density nodular lesion seen over left side of nose.
measuring 1.5x1.6x2.0 cms in size smooth scalloping is seen in antero-inferior aspect of underlying left nasal bone. No significant contrast enhancement is seen within the lesion. Intranasal extension of lesion is seen with thickening of anterior aspect of nasal septum. Subtle thickening in antero-superior aspect of nasal septum seems to extend into the right side of cribriform plate with small bony gap (likely thin connecting pedicle), likely suggestive of nasal glioma. The mass was excised with a lateral rhinotomy incision under general anesthesia. The Histopathology showed features of a glioma. Postoperatively recovery was uneventful.

**DISCUSSION**

Nasal gliomas are not true neoplasms; they originate from ectopic glial tissue left extracranially following abnormal closure of the nasal and frontal bone during embryonic period.

Therefore, some authors recommend using the glialterm' instead. They are locally aggressive lesions noticed at birth or during early childhood, but may be present at any age. The skin covering them may have telangiectasia. Nasal gliomas are seen more often in females, with a female:male ratio of 3:1. Our patient is an 18-month old female. Extranasal gliomas are skin-covered nodules most often located at the bridge or root of the nose, although they may also be found at the nasal tip. They are often located slightly to one side of the midline and range in size from 1 to 5 cm. In our patients, tumor was located at the root of the nose, just slightly to one side of the midline, and it was nodular in appearance. Nasal encephaloceles and nasal gliomas have a similar embryological origin but, as the nasal encephalocele is a herniation of the intracranial contents, it must have an intracranial connection through a bone defect. The nasal glioma, however, is ectopic.
sequesterated tissue and not a herniated structure, although a connection with CNS is present in 15-20% of cases. It is considered important to distinguish nasal glioma as from nasal encephaloceles because of the risk of infection spreading inward along the intracranial communication in the latter to produce meningitis. Diagnosis of both intranasal and extranasal gliomas involves a detailed CT study of the nasofrontal area and anterior cranial fossa to rule out intracranial connections. Needle aspiration of these masses is to be avoided, because of the danger of iatrogenic meningitis. Other intranasal neural tumors, including neurofibromas, and neurilemmomas may be distinguishable from intranasal gliomas. Extranasal gliomas with no obvious CNS connection may be excised externally. Postsurgical defects of the nasal bones may spontaneously fill in over time or may require bone grafting at a later date. If a CSF leak is encountered, a bifrontal craniotomy approach may be required.

Intranasal gliomas usually arise from the lateral nasal wall and can be approached via a lateral rhinotomy incision or endoscopic approach. For pure intranasal gliomas, a transnasal endoscopic approach is recommended for complete removal of the intranasal mass with no postoperative facial deformity. If an intracranial connection is found, a craniotomy or an external ethmoidectomy may be necessary. Lateral rhinotomy incision was done in our patient. During the 10-month follow-up period no recurrences was seen.

REFERENCES


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