



Nasopharyngeal Teratoma Associated with Cleft Palate in a Newborn

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ABSTRACT

Teratomas of the head and neck are rare congenital lesions, usually presenting in the neonatal period, comprising less than 10% of reported cases. Nasopharyngeal teratomas (NPT) are even rare. The most common presenting symptom of NPT is respiratory distress. The management of choice for NPT is surgical excision with excellent prognosis and less chance of recurrence.

Keywords: *Teratoma; Nasopharyngeal tumor; Cleft Palate; Neonate; Airway Obstruction.*

INTRODUCTION

Teratomas of the head and neck are rare congenital lesions comprising less than 10% of reported cases, and nasopharyngeal teratoma (NPT) is even rarer^[1]. Teratomas are a special type of mixed tumor that contains recognizable mature or immature cells or tissues representative of ectodermal, mesodermal and endodermal layers^[2]. Teratomas can develop in almost any area of the body, but usually occur in median sites^[3]. Most common site of head and neck teratomas are cervical with the nasopharynx being the second most common location accounting for approximately 2% of all pediatric teratomas^[4].

We report a rare case of a congenital nasopharyngeal teratoma with cleft palate in a full term neonate which presented as acute respiratory distress and cyanosis.

CASE REPORT

A male baby was born at term to a non consanguineous parents with uneventful antenatal period and referred for respiratory distress secondary to the presence of an nasopharyngeal mass. The patient was kept intubated. At initial examination, a soft, purplish mass was noted in nasopharynx causing obstruction to the airway along with cleft palate (Fig. 1).



Fig1. Nasopharyngeal teratoma with cleft palate

There were no other abnormalities found in the head and neck region. Under general anesthesia the lesion was excised. There was no post-operative complications. On the gross pathological examination, the excisional material was a grey brown soft tissue mass of $2.6 \times 2.2 \times 1.4$ cm in size whose surface was covered with skin (Fig. 2).

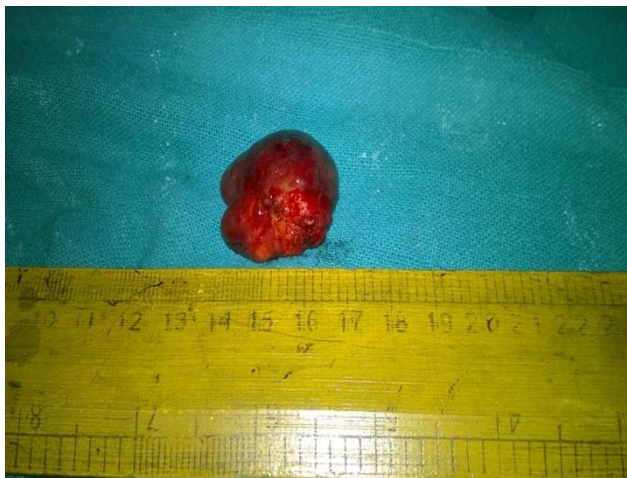


Figure 2. Excised nasopharyngeal teratoma mass

Histologically, the mass was consisting of squamous epithelium, sebaceous adnexal glands, salivary gland like structures, fatty tissue bone and wide areas of glial tissue. There were no immature cells or malignant components. These findings confirmed the diagnosis of nasopharyngeal teratoma along with cleft palate.

DISCUSSION

Teratomas are rare congenital lesions particularly in the head and neck region. Overall incidence of teratomas is 1 in 4000 births, but only 10% are found in the head and neck^[5]. They most commonly arise from the midline or lateral nasopharyngeal wall while malignant teratoma to be more common in men^[6]. The majority of neonates with nasopharyngeal teratomas can be successfully intubated either via the oral or nasal routes, tracheostomy may be needed in some cases^[7]. In 6% of all cases, teratomas are associated with malformations such as cleft palate, bifid tongue, and bifid uvula^[8]. Cleft palate was present in our case. Most of the congenital nasopharyngeal lesions present as an emergency respiratory problem and require immediate surgery, as in our case. Teratomas can be either benign or malignant. Benign ones consist of mature tissue components, as in our case, while those with malignant potential contain immature tissues; benign teratomas may undergo malignant change with age^[5]. Complete surgical excision is the main line of treatment, which depends on the site of the tumor^[3].

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