POSTERIOR CHOANAL ATRESIA — A CASE REPORT

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INTRODUCTION

Posterior Choanal Atresia is a congenital lesion presenting as a respiratory distress in infants. PCA can be fatal if not recognised early. Due to the rarity of this condition, 1:7,000 to 8,000 (1) this case is reported.

CASE REPORT

TCK, a 38 day old male infant, birth weight 1.8 kg., was referred to the University Hospital, with a history of aspirating his feeds and turning cyanotic. He was noted to have purulent nasal discharge. Clinical Examination revealed a 2.94 kg infant, with an oral airway and a Ryle's tube was noted in the right nostril. (This was forcibly inserted at the district hospital before referral). There were signs of pulmonary aspiration. He was also noted to have hypospadias with bilateral hydrocoele. Roving nystagmus indicating blindness was noted. Radiological contrast study of the nose showed an obstruction to the left nasal passage at the level of the posterior choana. X-rays of the chest revealed aspiration pnemonia.

The child was treated initially with antibiotics, oral airway and Ryle's tube feeding was continued. When the pulmonary condition was better, an examination under anaesthesia revealed a total membranous obstruction on the left posterior choana and partial membranous obstruction at the right choana. This membrane was perforated and enlarged railroading method. Size 12 nasogastric tubes were inserted into both the nostrils. These were secured and anchored at the columella by a nylon passed through both the tubes around the posterior edge of the septum. A smaller nasogastric tube was passed through the right tube for feeding purposes. In the first two post operative days, the child was managed with an oral airway and regular suctioning of the nasal secretions. The rest of the post operative period was uneventful and the child was discharged on the twelfth post operative day. Six weeks later the nasal tubes were removed and six months follow-up to date, the nasal airway is clear and no further episodes of aspiration or cyanosis occurred.

DISCUSSION

Neonates are obligate nasal breathers because of the intrinsic nasoreceptor reflex (2). Hence posterior choanal atresia presents as an emergency with respiratory distress, aspiration and attacks of cyanosis. PCA was first described in 1775 (3). Various congenital anomalies have been associated (blindness, cardiac anomalies, etc) (3). 10%—20% of these atresia are membranous. Diagnosis is confirmed by radiographic contrast studies. Management of the membranous form of the atresia is via a transnasal approach, perforating the membrane and dilatation followed by stenting with an airway. A few patients may require dilatations at regular intervals. A McGovern nipple (2) has been advocated for feeding and maintenance of airway until the child is fit for anaesthesia and surgery.

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