

Ganesh Man Singh Memorial Academy of ENT-HN studies, Tribhuwan University Teaching Hospital, Institute of Medicine, Kathmandu.

# Correspondence to

Dr Urmila Gurung Lecturer Ganesh Man Singh Memorial Academy of ENT-HN studies, Tribhuwan University Teaching Hospital, Institute of Medicine, Kathmandu. Email: doc urmila@yahoo.com

# Gastric Heterotopia Nasopharynx

Gastric heterotropia in the nasopharynx is a rare condtion. We present a 5 months baby with nasopharyngeal gastric heterotropia which was treated by excision via transpalatal approach.

Heterotropia, nasopharynx, excision.

# INTRODUCTION:

Nasopharyneal mass in infants ranges from hamartoma, encephalocele, dermoid cyst, neurofibroma, lymphangioma, hemangioma and teratoma<sup>1</sup> but gastric heterotropia in the nasopharynx is rare. We present a rare case of nasopharyngeal gastric heterotopia in a 5 months old baby.

# **CASE REPORT:**

A 5 months old female child was brought to the ENT Out Patient Department with complaints of noisy breathing, left nasal discharge since early childhood and left nasal mass since 2 months. Examination of nose and paranasal (PNS) sinuses showed a pale mass occupying bilateral nasal cavity and the nasopharynx. Biopsy was taken from the mass under GA which was suggestive of inflammatory polyp. CT scan of nose and PNS showed a 4.4X2.1X1.7 cm mixed tissue density occupying the left nasal cavity with posterior extension to left choana, posterior half of right nasal cavity and roof of nasopharynx. There was no bony erosion or intracranial extension noted (Fig-1). MRI brain showed heterogeneous signal intensity mass in nasal cavity with dominant involvement of left side with extension in nasopharynx and



Fig: 1. CT scan showing mixed tissue density occupying the bilateral nasal cavity, choana and nasopharynx



Fig: 2. MRI brain showing heterogeneous signal intensity mass nasal cavity, nasopharynx and oropharynx

oropharynx (Fig-2). The nasopharyngeal mass was then excised by transpalatal approach. There was a single pinkish mass in the bilateral nasal cavity (left>right) and in the nasopharynx (Fig-3). The gross specimen showed elongated, tubular mass around 6x1cm in size. On cut section, it contained brownish thick material. Histopathological examination showed full thickness colonic tissue with lamina propria, muscular layer and serosal layer, well formed globlet cells and lymphoid tissue. The lumen contained homogenous proteinaceous material. Nasal mucosa was not seen (Fig -4). Left nasal cavity was stented using endotracheal tube size 3 which was removed post operatively after three weeks.

### **DISCUSSION:**

Heterotopia is a benign mass of histologically normal tissue present at abnormal sites.<sup>1,2</sup> There have been reports of nasopharyngeal heterotopia consisting of brain tissue, cartilage, skin<sup>2</sup> but nasopharyngeal gastric heterotopia is a rare condition. The common sites of gastric heterotopia are upper oesophagus, small and large intestine, Meckel's diverticulum and less frequently the midline neck,



Fig: 3. Gross specimen showing elongated tubular mass

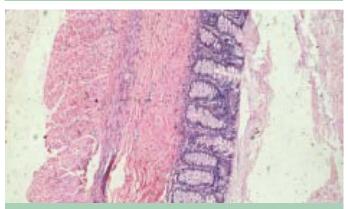


Fig: 4. Histological specimen showing normal colonic tissue. (H&E, X 20)

oral cavity, submandibular gland.1

The occurrence of nasopharyngeal gastric heterotopia has been thought to be of developmental origin. Embryologically the nasopharynx is derived from the primitive gut. The gastric heterotopia at this site could originate from islands of endoderm from the primordial stomach which separate and differentiate into gastric epithelium.<sup>2</sup>

Most gastric heterotopia are asymptomatic<sup>1,3</sup> but those located in the oral cavity and pharynx can cause dysphagia and airway obstruction.<sup>1</sup> Our patient had bilateral nasal obstruction without feeding difficulty.

Surgical excision is the treatment of choice for gastric heterotopia in nasopharynx taking special attention to maintain the airway. 1,2,3,4 In our patient, a stent was kept in the left nasal cavity to keep the nasal airway patent and the child has no respiratory difficulty post operatively.

# **CONCLUSION:**

Nasopharyngcal gastric heterotopia is a rare condition presenting as nasal obstraction in children surgical excusion is the treatment of choice for this condition.

#### **REFERENCES:**

- Marin Gabríel MA, ZMedina López C, Delgudo Mu?íoz MD, Rodríguez Gil Y. Gastric heterotropia in the nasopharynx causing airway obstruction in the newborn. Int J Paediatr Otorhinolaryngol 2004; 68: 961-4.
- Wacrenier A, Fayoux P, Augusto D, Laussel AC, Gosselin B, Leroy X. Gastric heterotopia in the nasopharynx. Int J Paediatr Otorhinolaryngol 2002; 64: 65-7.
- 3. Daher P, Riachy E, Zeidan S, Saad A. Upper airway obstructive symptoms because of ectopic gastric mucosa in a newborn: a case report. J Paediatr Surg 2006; 41: e7-9.
- Downs BW, Shores CĞ, Drake AF. Choristoma of the nasopharynx. Otolaryngol Head Neck Surg 2000; 123: 523.