

Lingual Gastric Duplication Cyst in a New Born

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Abstract A rare case of gastric duplication cyst of tongue is reported.

Keywords Intraoral swelling of newborn · Sublingual cyst · Duplication cyst · Gastric duplication cyst

Introduction

Intra oral swellings in the newborn pose an emergency situation producing respiratory difficulty. Macroglossia, lymphangioma & hemangiomas of tongue and lymphatic cyst of floor of mouth, tumours arising from hard & soft palate, teratodermoids are anecdotal cases of tumours of the mouth presenting in the new born [1–5]. GI duplications of tongue are a rare entity. A rare case of lingual gastric duplication cyst is being reported.

Case Details

A term baby boy was admitted with a large sublingual cyst. Child was able to breathe well but was unable to suck well. Antenatal maternal USG detected intraoral cyst. Examination revealed a cyst $4 \times 6 \times 4 \text{ cm}^3$ (Fig. 1) stretching the tongue to that extent that it was barely visible. The tongue was pushed dorsally and was stretched side wards. MRI showed a well loculated cyst in close relationship with undersurface of anterior 2/3rd of the tongue. Tongue

muscles appeared separate (Fig. 2). Patient was taken up for surgery there was a $4 \times 6 \times 4 \text{ cm}^3$ opaque thick walled cyst very closely adherent to the extrinsic muscles of the anterior 2/3rd of the tongue. The cyst could be excised in toto. Postoperative period was uneventful. Histopathology revealed duplication cyst with gastric lining.

Discussion

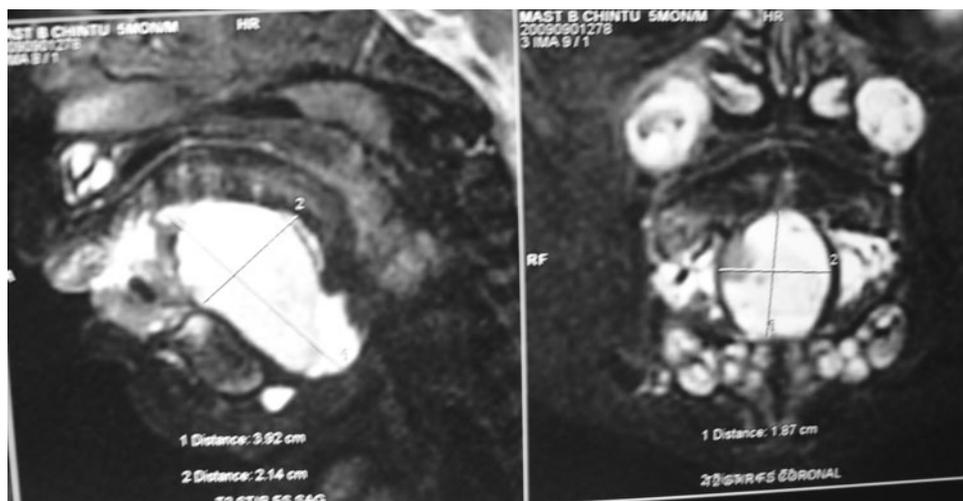
Intraoral swellings are uncommon in the newborn age [1–5]. Macroglossia, duplication cysts, lymphangioma & hemangiomas of tongue and lymphatic cyst of floor of mouth, tumours arising from hard & soft palate, teratodermoids are



Fig. 1 Clinical Photograph showing sublingual cyst elevating the tongue

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Fig. 2 MRI scan showing posterior extension of the sublingual lesion



some of them. Duplication cyst can occur anywhere in the GIT from mouth to anus. Size determines the timing of presentation. Larger the size more acute is the presentation with dyspnoea or dysphagia. The duplication cysts are usually lined by epithelium of gastric, intestinal, pancreatic or respiratory origin [1, 2, 6–10]. Existing theories of enteric duplication cyst of the tongue do not satisfactorily explain pathogenesis of gastric lingual duplication cyst. Epithelial inclusions during fusion of primordial tissues from an incomplete coalescence leading to formation of cysts. Persistence of epithelial buds and theory of trapped nests of endodermal tissue are other theories offered to explain lingual duplication. However, it is extremely difficult to explain embryologically tongue and stomach to be related to each other. GI duplication cysts are cyst lined with GI epithelium and attached to any part of GIT and the lining may not anatomically corroborate with the site of lesion. Therefore, gastric duplication cyst of the tongue are cysts of tongue lined by gastric epithelial tissue, satisfying the definition of duplication cyst.

Conclusion

A rare case of intraoral sublingual gastric duplication cyst in a newborn is reported.

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