

Case Report

Isolated loop of Intestine presenting as a lateral neck lump: unusual presentation of neck teratoma

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Abstract:

Dermoid cysts are benign congenital lesions usually presenting as midline neck mass. They rarely appear in the lateral neck region. There is a report of dermoid cyst along with an isolated loop of intestine presenting as lateral neck swelling in a 10-year-old boy.

The intestinal loop was completely separated from the pharynx and full of muconeum was found after opening the loop. Complete excision was done. After a thorough search, we conclude that this is the first reported case of neck teratoma presenting as loop of intestine.

Key words: *Dermoid, Teratoma, Primitive loop of intestine.*

Introduction:

Dermoid cysts are benign lesions of congenital origin usually presenting as a midline neck mass. They rarely appear in the lateral region of the neck.¹ Although usually present at birth, they can appear at any age. Dermoid, epidermoids are ectoderm-lined inclusion cysts. Epidermoids have only squamous epithelium; dermoids contain hair, sebaceous and sweat glands and squamous epithelium.² Both arise from trapped pouches of ectoderm near normal folds or from failure of surface ectoderm to separate from the tube or from ectoderm differentiation of multipotential cells most likely pinched off at the time of anterior neuropore closure.³

Congenital teratoma of the head/neck may be explained in a similar manner. In the head/neck these completely occur in the peri-orbital root of the nose, post auricular, sublingual and submental region. Unusual location of dermoids includes – tonsil, nasopharynx, middle and posterior cranial fossa and lateral neck which can be confused with other lateral neck lumps like lymphangioma, cystic hygroma, hemangioma, lipoma, branchial cysts and neck abscess.

Case report:

We report the case of a 10-year-old boy presented in December 2005 with a history of painless lump in the right side of upper part of the neck since birth. The lump was gradually increased in size. On examination it was found to extend in the right submandibular region. It was soft in consistency, partially compressible and was not translucent. Surprisingly visible peristalsis was noticed on palpation which gives us

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Fig.-1: Lump in the neck

a suspicion of intestinal origin of the lump. Aspiration was done with 20 ml syringe and was negative for fluid/blood. Ultrasound scan showed some cystic nature of the lump. After exploration, an intestinal loop was found along with its own blood vessels and mesentery in a thin sac.



Fig.-2: showing intestinal loop.

A dermoid cyst was also found attached to the intestinal loop by a fibrous band. Complete excision was done. The intestinal loop was found to be separated from the pharynx. The intestinal loop was opened and found full of meconium and the cyst showed full of cheesy materials. Both the loop and cyst were sent for histopathology which also confirmed the intestine.

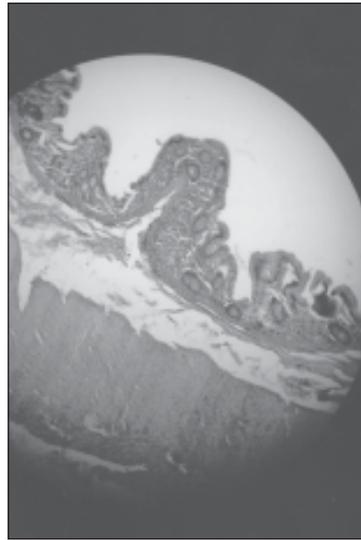


Fig.-3 : Histopathology of intestine.

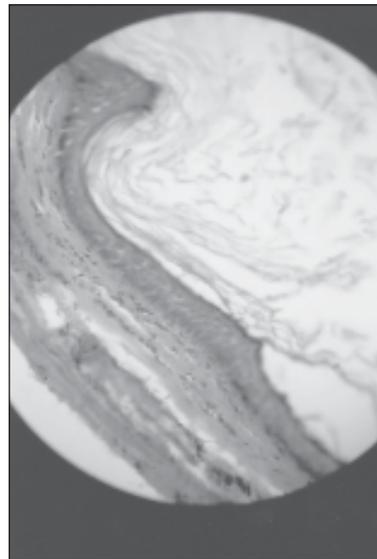


Fig.-4: Histopathology of dermoid cyst.

Discussion:

Most dermoid cysts of the head and neck are derived from epithelial debris or rest enclaves during midline closure of the bilateral first and second branchial arches.³ Head neck teratoma may be explained in a similar manner. Only 6 to 9 percent of dermoid cysts observed in human involve the head neck region.³ Dermoids or hairy polyps in the oro-nasopharyngeal region usually present as pedunculated or sessile masses.⁴ Neck masses in children most often represent benign lymphadenitis due to infection.⁵ TB lymphadenitis is the commonest cause of cervical lymphadenopathy in Bangladesh.

Congenital masses are the most common non inflammatory neck lesions in children.¹ These can be found in patients of any age. Thyroglossal duct and branchial cleft cysts and fistulas are formed by incomplete obliteration of the thyroglossal duct and branchial clefts during embryonic development. Other congenital causes include lymphangioma, cystic hygroma, dermoid cyst and hemangioma.⁶ A diagnosis can be derived from a consideration of the history and physical findings, age of the patient, the location, size, and consistency of the mass. A careful otolaryngologic examination including the nasopharynx, a chest radiograph, and appropriate blood studies - should be routine.⁵ When malignancy is suspected, FNAC or biopsy of the mass is indicated.

Dermoid cysts of the lateral neck are rare, with the majority of head and neck dermoids occurring in the midline.⁷ Congenital isolated loop of intestine in the lateral neck may be due to sequestration of endodermal cells or endodermal differentiation of multipotent cells most likely pinched off at the time of neuropore closure or from misplaced embryologic germ cell.² These contain a medley of heterogeneous tissues, typically reflecting more than one of

the three embryologic germ layers. Complete surgical excision is the treatment of choice. With complete excision recurrence is unusual.

Conclusion:

A careful history, physical findings and routine investigations can diagnose most of the neck lumps. However surgical and histopathology might help to conclude a diagnosis in doubtful case.

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