

DERMOID CYST IN THE TONSIL- A CASE REPORT

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Abstract

Dermoid cysts are squamous epithelium lined cyst commonly found in head neck region. Dermoid cyst arising in pharynx is very rare. It presents in early infancy or childhood as a unilateral mass arising from the tonsil with obstructive features. Surgical excision is the curative treatment of this unusual condition. This disease should be considered as a differential diagnosis in dealing with unilateral enlargement of tonsil in childhood.

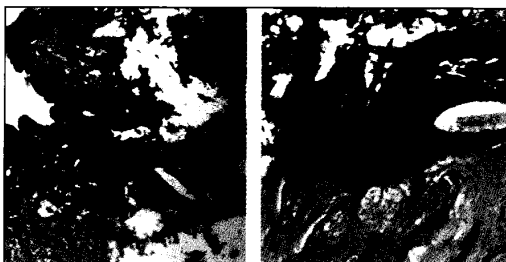


Photo 1

Photo 2

Introduction

Dermoid cysts arise from epithelium that has been trapped in deeper tissue either during embryogenesis or traumatic implantation in body surface. Though it can arise in body cavities, but the commonest site is head neck region. The cyst wall is lined by stratified squamous epithelium. The cyst may contain variable amount of tissues from germ layers. It commonly presents in head neck region as a round slow growing mobile painless cystic mass usually in floor of the mouth or submandibular region or in midline¹. Dermoid cyst arising in the pharynx is extremely rare. Here we present clinical presentation and management of dermoid cyst arising in tonsil of a 9 years old boy.

Case report

A 9 years old boy from a rural area of Chittagong reported with gradual enlargement of one tonsil for

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the last 5 years with feeling of lump in the throat and occasional pain in throat on same side for last 2 years. There was no history of severe sore throat with fever, mouth breathing. But the parents noticed mild snoring for the last few months. The parents consulted the local doctors but there was no improvement. On clinical examination, his left tonsil was considerably bigger than the right with a round swelling about 2 cm in size in it's upper pole. Regional lymph nodes were not palpable. Besides this no abnormality was detected in any system of the boy. In laboratory investigation, his blood count and urine examination findings were within normal limit. X-ray soft tissue neck and chest revealed no abnormality. We advised FNAC from the tonsillar swelling but the child did not co-operate in collection of specimen. So, we diagnosed the case as a benign tonsillar lesion and advised for tonsillectomy. Accordingly he underwent tonsillectomy under general anaesthesia in a private hospital of Chittagong city. After removal of the left tonsil, we examined the dissected specimen. There was a cyst about 2 cm in size containing creamy white cheesy materials and hairs. We submitted the cyst for histopathology. On histopathology, the cyst wall was lined by stratified squamous epithelium containing hairs, hair follicles, sebaceous and sweat glands. So a final diagnosis of dermoid cyst was made. The patient had an uneventful postoperative recovery and discharged from the hospital on 2nd postoperative day. The patient followed up weekly for 1 month and 3 monthly for 1 year, but no recurrence was noted.

Discussion

The commonest site of dermoid cysts are head neck region. They arise from epithelium that has been trapped in deeper tissue during embryonic period or penetrating injury in skin surface. There is no sex predominance of it. Dermoid cysts in head neck region are three types- epidermoid cyst, true dermoid cyst and teratoid cyst. The epidermoid cyst is lined by squamous epithelium having no adnexal structures, contains keratin materials and this is the common variety. True dermoid cysts contain skin appendages such as hair follicle, sweat gland, sebaceous gland etc¹. These are either congenital or

acquired. The acquired type develops due to implantation of epidermis by puncture type of injury on skin surface. The congenital type derives from trapped embryonic multipotential cell along the line of embryonic fusion. The teratoid cyst contains elements from all germ layers- skin, nail, teeth, nervous tissue, glands etc. It is the rarest form of all and less than 10 cases in head neck region in adult have been described¹. Dermoid cyst in pharynx is very rare. Here it may arise as cystic swelling or pedunculated mass covered by hairy skin containing dermal glands known as hairy polyp². In the oropharynx, palatine tonsil is a very important structure which is affected by many disease processes. Apart from malignancy, there are many benign disease like papilloma, minor salivary gland tumor, fibroma, schwannoma^{3,4}, inclusion cyst, lymphoid polyp⁵, inflammatory lesions etc cause unilateral tonsillar enlargement, but tonsillar swelling due to dermoid is an unusual one. In early infancy it appears as hairy polyp⁶. The clinical presentations depend on site and size of the lesion². Intermittent upper airway obstruction, feeding difficulties^{7,8}, intermittent swelling in the mouth and abnormal cry are the common features⁹. Sometimes it prolapses into nasopharynx causing difficulty in diagnosis⁸. If the lesion is very small one, that may be unnoticed in early life. When it enlarged enough and produces symptoms later on, patient seeks medical advice. The patient or parents may notice tonsillar swelling or difficulty in swallowing due to the mass effect. Sometimes there may be recurrent infection in the cyst causing unilateral sore throat. During examination of a patient with unilateral enlargement of the tonsil great care must be taken to exclude a parapharyngeal mass¹⁰. After clinical assessment, every patient should go sonographic and radiological examination. If tooth like calcifications are seen within the lesion, teratoma should be suspected and in that case CT scan is recommended to exclude intracranial involvement¹¹. Surgical excision is the curative treatment of dermoids. Complications of surgery are negligible in expert hands. Difficult intubation, respiratory difficulties and haemorrhage are the usual ones in dealing with dermoids in pharynx¹¹. If the cyst can be excised completely, there is no chance of recurrence. In our patient, peroperative and postoperative periods were uneventful and the patient had a smooth recovery. He was well when he last followed up one year after surgery.

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