HAMARTOMA OF THE HEAD AND NECK

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Abstract-Hamartoma is a relatively uncommon lesion in head and neck region. Although hamartoma is not a true neoplasm, but it behaves in tumor like manner in many ways. In this manuscript five cases of hamartoma of head and neck region, one case each from soft tissue cheek, soft tissue neck, maxilla, gum margin and tongue are reported and pertinent literature is reviewed. Acta Medica Iranica 33 (3&4): 106-109; 1995

Key word: hamartoma; teratoma; dermoid; teratoid; charistoma

INTRODUCTION

The term hamartoma was introduced by Albrecht to designate tumor like, but non-neoplastic malformations or inborn errors in the development of one of the three germinal layers (1). Hamartoma is characterised by abnormal mixture of tissue, indigenous to the part from which it arises. Such malformations produce an excessive number of cells which reach the maturity and then ceases to reproduce, so the growth is selflimiting (2). The term hamartoma should be used only when there is definite evidence of a developmental anomaly (3). These malformations include not only errors of development since birth but also the inborn tissue anomaly which manifests itself by excessive growth until the age of puberty.

Hamartomas frequently arise from skin or subcutaneous tissue, kidney, lung, liver, spleen, and gastrointestinal tract. These tumors however are rarely encountered in otolaryngological practice where they mostly occur as hairy polyps in nasopharynx (4,5,6). Hamartoma of cartilaginous type has been reported to arise from larynx, trachea, bronchus and lungs (7,8,9,10). Isolated cases were also reported from tongue, pharynx, cervical oesophagus, Eustachian tube, nose and paranasal sinuses (11). Five cases of hamartoma arising from various sites of the head and neck, which were treated at our center are reported in this study.

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CASE REPORT

Case 1. An 18-year-old male attended E.N.T. outdoor with the complaint of gradually increasing swelling over the right cheek since birth. The swelling was stationary for the last 2-3 years. On examination a swelling of 8×8 cm in size, extending from lips to angle of manible was seen (Fig. 1). It was non-tender and well defined. In the central region the skin adhered to the tumor mass. From the buccal side firm nodules could be palpated in the swelling. Patient was admitted and investigated. Routine investigations were within normal limit. Patient was operated under general anesthesia and wide excision of growth along with reconstruction of cheek was done (Fig. 2). Histopathological examination confirmed the diagnosis of neurofibromatous hamartoma.

Case 2. A 15-year-old male was referred to us from Dental Services. Patient had a pain with less progressive swelling over the left upper jaw for the last 10 years (Fig. 3). The swelling was hard. The gingivo labial sulcus was completely obliterated. The teeth from left central incissor to second molar were displaced. The swelling had also involved left side of palate. Patient was admitted and investigated. Skiagrams of para-nasal sinuses revealed opacified left maxillary antrum. There was no bony erosion or destruction. Patient was operated and left sided subtotal maxillectomy was done. Histopathological examination established the diagnosis of sclerosing angiomatous hamartoma of maxilla.

Case 3. A 14-year-old boy presented with irregular pedunculated molar. The swelling was present since the last seven years. It was non-tender and firm in consistency. Its surface was irregular. There was history of recurrent mild bleeding from swelling. Patient was provisionally diagnosed as a case of epulis and wide excision of tumor was done. Histopathological examination revealed it as a vascular hamartoma.

Case 4. A 15-year-old boy attended E. N. T. outdoor with painless progressive swelling in right supra clavicular fossa since the last eight years. Size of swelling was 6 × 6 cm. Its margins were ill-defined and merged impercceptably with the surrounding structures.

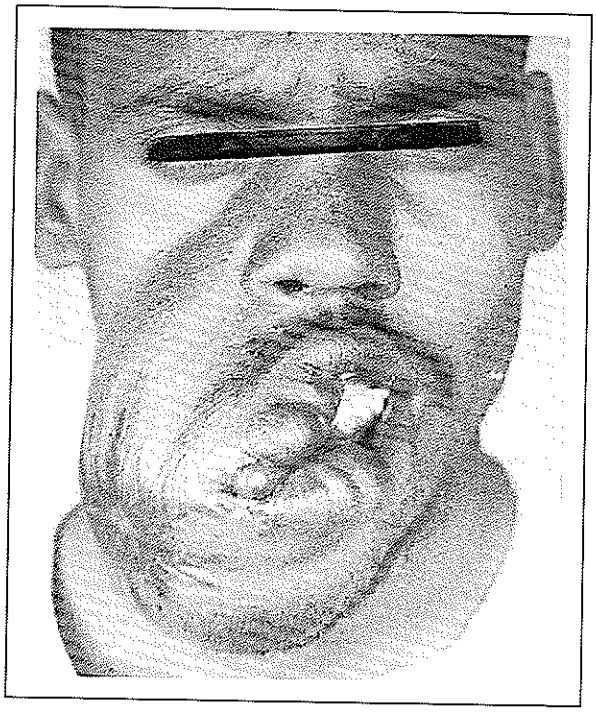

Fig. 1. Clinical photograph of the Case 1.

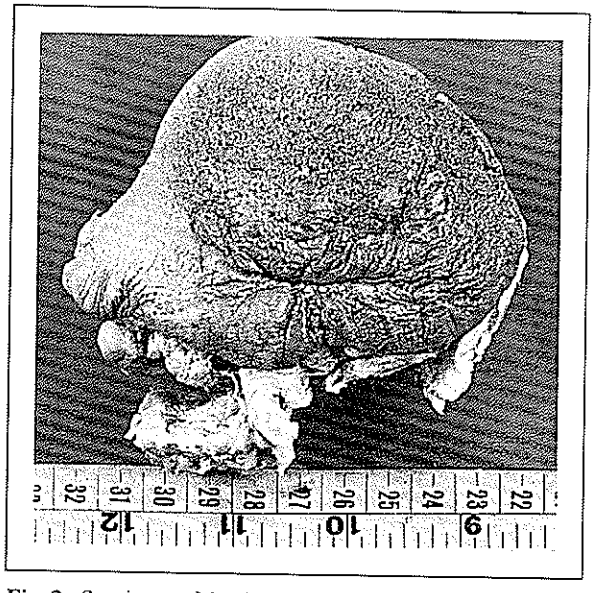

Fig. 2. Specimen of the Case 1.

The tumor was superficial to sternomastoid muscle. The tumor mass was excised (Fig. 4). Histopathological examination established the diagnosis of vascular hamartoma.

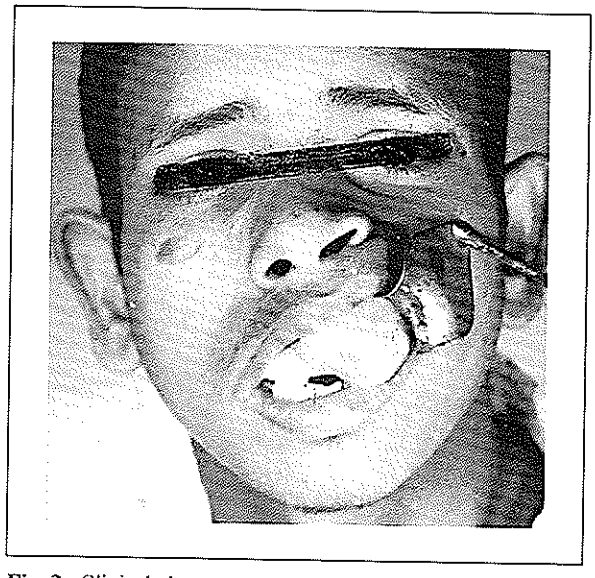

Fig. 3. Clinical photograph of Case 2.

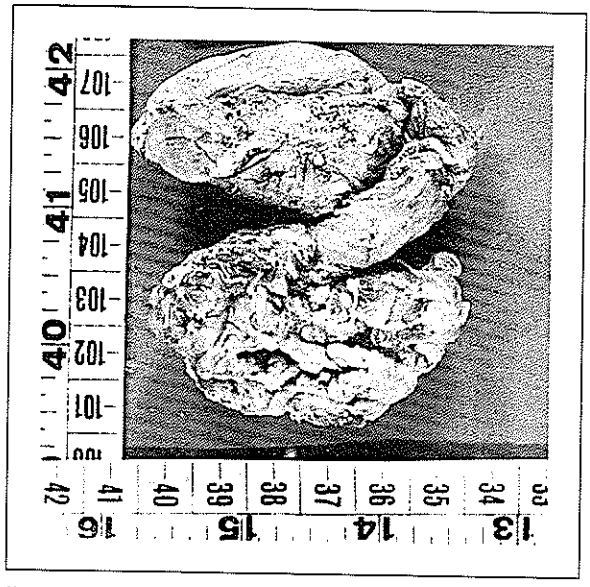

Fig. 4. Specimen of Case 4.

Case 5. A 3-year-old girl was brought to E.N.T. outdoor for swelling over the ventral surface of tongue (Fig. 5). The swelling was present since birth and gradually increasing in size. It was non-tender. It's margins were well defined and the surface was smooth. Its consistency was firm. The wide excision of tumor was done. The histopathological examination confirmed the diagnosis of vascular hamartoma.

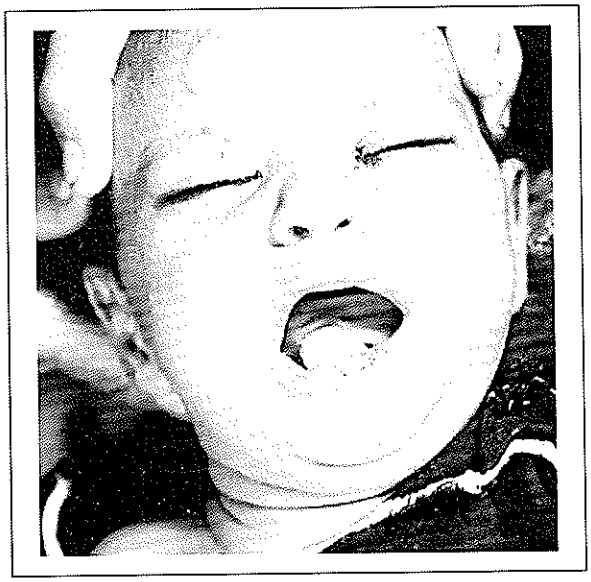

Fig. 5. Clinical photograph of Case 5.

DISCUSSION

In the present study five cases of hamartoma of head and neck, which were encountered in E.N.T. Department, (Banaras Hindu University, Varanasi, India) in the last ten years, are reported. These tumors arose from different sites, soft tissues of cheek and neck, maxilla, tongue and from gum margins. All the cases were followed up for a period of two years. There was no recurrence.

As per the Willis classification (12) four cases were of vascular variety while the first case was of neuro-fibromatous variety.

A hamartoma more often than not presents many clinical features of a tumor though basically it is a malformation. Hamartoma is composed exclusively of components derived from local tissues (13). They grow concurrently with the host forming a mass of recognizable but unrecognized tissues which contain examples of structure derived from any of the three germinal layers (most commonly mesoderm). These must be differentiated from teratomas, dermoid cysts and choristomas. The term teratoma implies a spontaneous autonomous new growth derived from pluripotential tissue. It is foreign to the region in which it occurs and is composed of elements of all the three germinal layers (14). In earlier literature teratoma and hamartoma were included under the common name teratoid (15). Dermoids have the same histogenesis as teratoma but they are cystic neoplasm and originate from only two layers, the ectoderm and mesoderm. Another related concept that has to be separated from the hamartoma is the charistoma which is a neoplasm of ectopic tissue. Its tissues are not indigenous to the organs in which it is located. Clinically it is difficult to differentiate between teratomas, dermoids, charistomas and hamartomas.

As the clinical course of hamartoma is essentially benign, the treatment of choice is surgical excision. Complete removal of tumor mass by wide surgical excision seems ideal to deal with such conditions. Once the tumor mass is completely removed there are no chances of recurrence (16,17).

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