

Research Journal of Pharmaceutical, Biological and Chemical Sciences

Intraparotid Hemangioma In Adults.

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ABSTRACT

The term *hemangioma* was originally used to describe any vascular tumor-like structure. It usually presents at or around birth or appear later in life. The term is derived from the Greek words "*haema*" which means blood, "*angeio*" meaning vessel and "*oma*" meaning tumor. Hemangioma is a benign neoplasm of endothelial cells. In this paper, we report two rare cases of intraparotid hemangioma in adults.

Keywords: Intraparotid Hemangioma, cyst, calcification

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INTRODUCTION

Hemangioendothelioma (HAE) or hemangioma, of the salivary gland is a benign tumor that grows rapidly and usually not noticed at birth, but becomes apparent later in life [1, 2]. There may be one or more cutaneous hemangiomas or the parotid lesion itself may extend to involve the skin. Accurate identification of parotid HAE is important in order to avoid unnecessary biopsy or therapy [1].

Case Reports

Case Report 1

A 35-year-old female patient reported to our department with a complaint of painless swelling in the left side of face for the past one year. Swelling started spontaneously one year before as a small swelling which gradually increased over a period of time to attain the present size. On examination, a single diffuse swelling, measured approximately 4 X 3cm in size evident on left side of the face extending anteriorly from angle of mandible posteriorly extending beyond the ear lobule, superiorly from the ear pinna. Inferiorly it crossed the lower border of mandible extending into the neck. (Figure1) Skin over the swelling appeared normal and secondary changes were not evident. Pulsations were palpable over the swelling.

Ultrasonogram (USG) revealed large cystic lesion containing few specks of ring calcification The cystic spaces show particulate matter with brownian movement suggesting abscess/fluid. USG findings suggested a left parotid abscess with regional lymph node involvement or chronic lymphadenitis near left angle of mandible. (Figure 2)

Colour doppler revealed positive doppler shift indicating the possibility of vascular lesion. A moderately defined 5.8 X 3.8 cm sized heterogenous soft tissue density lesion with multiple nodular calcifications, few showing central lucencies suggestive of phleboliths is seen replacing most of the left parotid gland.(Figure 3)

The post contrast images show progressive enhancement of lesion with pooling of contrast in delayed images and no significant washout suggesting possibility of low flow vascular malformation.

Case Report 2

A 55-year-old male patient reported to our dental OP with a chief complaint of swelling on right side of face since 6 years. Patient was apparently normal 6 years back, following which he developed a swelling on right side of the face. The swelling was gradual in onset initially small in size and later he noticed progressive enlargement of the mass. Then he began experiencing increasing pain, skin tightness and pulsation. (Figure 4).

A single diffuse swelling measured approximately 5 X 4 cm in size was evident on right side of the face. It extended anteriorly from 1cm away from nasolabial fold to posteriorly upto the ear lobule. Inferiorly from lower border of mandible extended upto 1cm below the infra orbital rim (Figure1). Skin over the swelling appeared mildly lobulated and secondary changes were not evident. Pulsations were visible and palpable over the swelling.

USG scan revealed a lesion measuring 55.4 X 17.8 mm seen in the region of right parotid gland. The lesion showed multiple vascular channels. Multiple areas of calcification were evident, with the largest that measured 5.3 mm in size seen within the lesion. Colour doppler revealed increased vascularity. Sonographic features were suggestive of hemangioma in right parotid gland. (Figure 5)

Considering the positive findings of case history, clinical findings and investigations the cases were finally diagnosed as intraparotid hemangioma.

Figure 1: Extra oral profile picture of case report one revealed swelling on left side of face.



Figure 2: Ultrasonogram of case report one revealed large cystic lesion containing few specks of ring calcification.

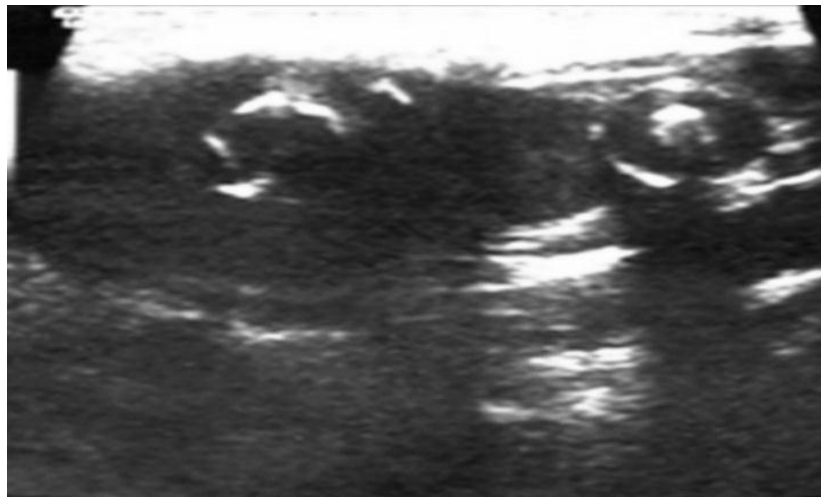


Figure 3: Colour Doppler of case report one revealed positive doppler shift indicating the possibility of vascular lesion.



Figure 4: Extra oral profile picture of case report two revealed swelling on right side of face.



Figure 5: Ultrasonogram of case report two showed multiple vascular channels.

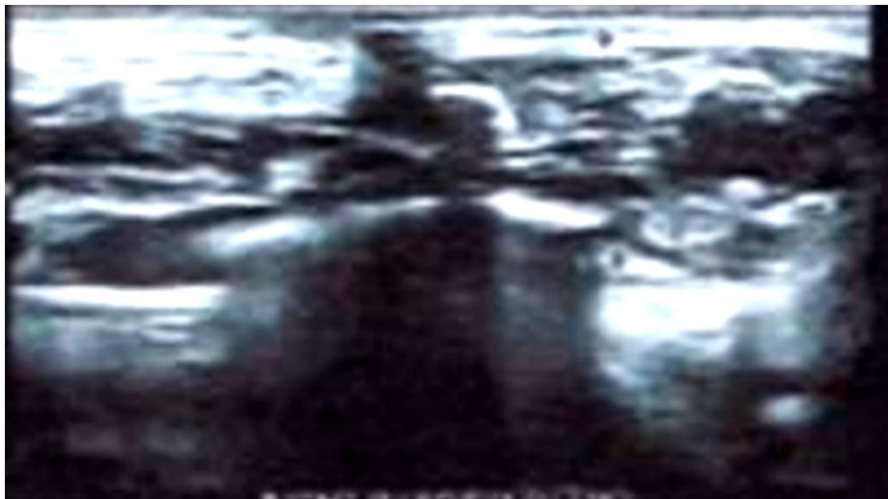
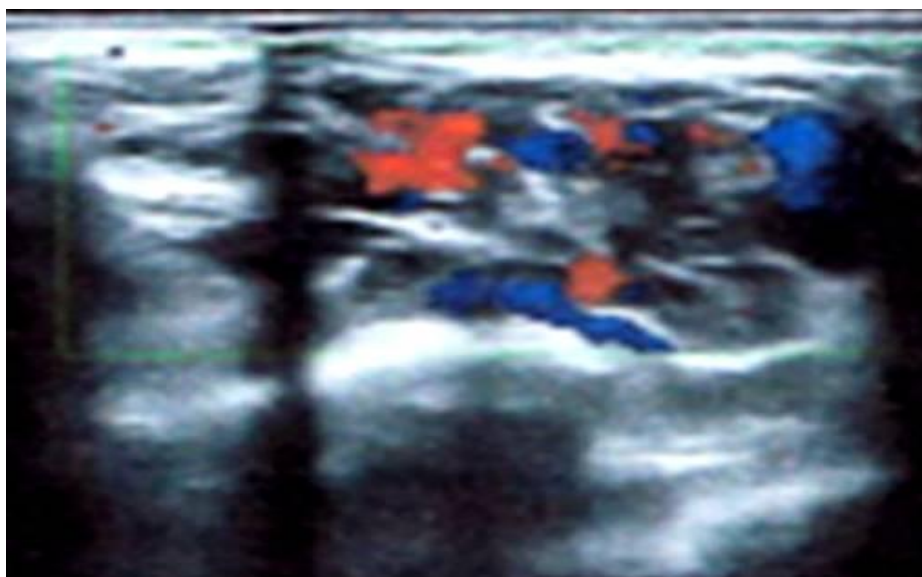


Figure 6: Colour Doppler of case report two revealed increased vascularity.



DISCUSSION

Hemangioma is one of the most common soft tissue tumor of childhood and rare in adults. Head and neck region is the most common site for hemangiomas development (about 60% of cases) [3].

However, they are rare in the oral cavity but may occur on tongue, lips, buccal mucosa, salivary glands, gingiva, alveolar ridge, palatal mucosa, and jaw bones [4]. It accounts for 1% to 5% of all salivary gland tumors, and over 90% are found in the parotid gland [5].

Hemangiomas occur twice as often in females as in males. Left side is more common than right side [6].

According to Enzinger and Weiss, hemangiomas are broadly classified into cavernous, capillary and miscellaneous forms like venous, arteriovenous, verrucous, haemangioma [7].

Changes in blood flow dynamic within hemangiomas result in thrombus and phleboliths. Phleboliths are calcified nodules that can be regarded as a characteristic property of venous or cavernous hemangiomas. Hemangioma may arise from the gland proper or by secondary invasion of subcutaneous blood vessels into the gland structure [7].

Hemangiomas usually appear 2-4 weeks after birth; grow rapidly till the age of 6-8 months and then slowly develop. By age 5-8 years, they start to involute and spontaneously regress in 70% cases [8].

The hemangioma appears like a soft mass, sessile or pedunculated, smooth or lobulated and may vary in size ranging from a few millimeters to several centimeters. They are usually deep red and may blanch on the application of pressure. [9] Malignant transformation has not been reported so far [10].

Plain X-ray may show multiple phleboliths. Ultrasonography may reveal hypoechoic heterogeneous lesions, with calcified phleboliths. Computed tomography scan shows tumor with enhancing quality of blood vessels.

Several treatment modalities are suggested for these lesions including surgical, cryosurgery, intralesional administration of corticosteroids or sclerosant (sodium tetradecyl), radiotherapy and embolization with silicone beads, steel coil, gel foam or cyanoacrylate.

CONCLUSION

Treatment of large soft tissue vascular lesions is a big challenge. Effective management of hemangiomas of the head and neck requires a team work, so as to understand the behavior of the lesion, complete the diagnostics needed to define the area involved and understand the outcome of interventional radiologic and surgical procedures. This knowledge can help determine the best treatment.

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