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RESEARCH ARTICLE

A CASE REPORT ON INFANTILE HEMANGIOMA

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Abstract

Infantile hemangiomas are the most common benign vascular tumors in childhood. They usually appear as macular or raised bluish nodular swelling.It most commonly involves head and neck region which results in tissue damage, ulceration, bleeding, functional impairment and disfigurement. We present a case of 4-year-old patient with infantile hemangioma in the left side of face.

Introduction:-

Hemangioma is the benign tumor which occurs due to proliferation of cells lining the blood vessels. Infantile hemangiomas (IHs) are the most common vascular tumors in infantswith an incidence of 5-10%, which appears in early infancy and ultimately regresses with time[1].They are commonly seen in head and neck region (60%), followed by the trunk (25%) and then the extremities (15%)[2] The risk factors mainly include prematurity, low birth weight infants, white race and females[2].The treatment modalities include conventional surgery, laser surgery, or cryosurgery. Treatment is not necessary in children since many hemangiomas resolve during teenage years. Here we report a case of4-year-old female with a swelling of left cheek region.

Case Report

A 4-year-old female patient reported to the dental OPD with a chief complaint of swelling over left cheek region since the age of 2 months. Her parents gave a history of swelling which was gradual in onset and slowly progressed to current size with no history of associated pain, seizures, fever and trauma. On extraoral examination gross facial asymmetry noted in left side of face with a diffuse swelling in the left middle third of face measuring approximately (2×2) cm extending superioinferiorly from infraorbital rim up to corner of mouth, mediolaterally from ala of nose to 3 cm away from tragus of ear [Figure 1].Overlying skin appearedbluish. The swelling was non tender,afebrile, soft in consistency,compressible, non-reducible and non-fluctuant on palpation.No port wine or birth marks werenoted.

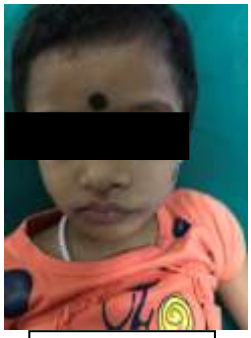

Figure 1

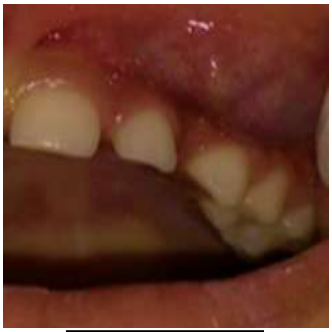

Figure 2

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On intra oral examination bluish swelling noted in the maxillary labial mucosa and vestibular region extending from 61 to 64 region of size approximately of size (3×2) cm. On palpation it was non – tender,soft in consistency,mobile, lobulated compressible, non- pulsatile [Figure 2]. The diascopy test was done and gave a positive result.

A provisional diagnosis of infantile hemangioma was given based on patient's history clinical findings and differential diagnosis considered were lymphangioma and A V malformation. Ultrasound of the face was done which revealed a hypoechoic lesion measuring about (29 ×10) mm in the left pre maxillary region over the nasolabial fold with well circumscribed margins suggested of hemangioma [Figure 3].

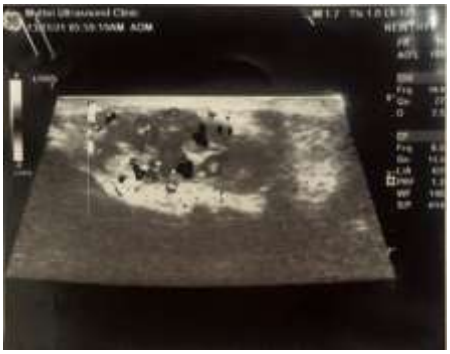

Figure 3

ACT Angiography was advised to know the blood vessel involved. As the patient was uncooperative a Magnetic Resonance Imaging (MRI) was carried out.MRI of face revealed well defined lobulated lesion in left premaxillary region of size (2.4×1.4×3.4) cm with scalloping of adjacent maxillary bone suggested of hemangioma. As radiographic features suggested of hemangioma, Surgical excision was done. The specimen was sent for histopathology which confirmed the diagnosis

Hence, we arrived at a final diagnosis of infantilehemangioma. Exploration of lesion with sclerotherapy was done under general anesthesia. A periodic follow up after 6 months revealed slight regression of lesion[Figure 4&5]

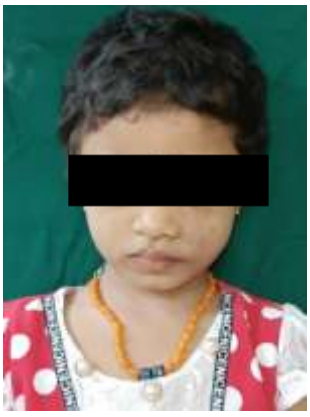

Figure 4

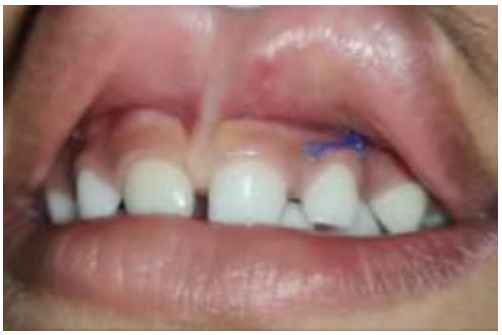

Figure 5

Discussion:-

Infantile hemangioma [IH]is the most common tumor in infancy with an incidence rate of approximately 5-10 %. First distinguished as a separate entity from other congenital vascular malformations by Mulliken and Glowacki in 1982[1]. The exact etiology is unclear but may develop due to cellular hyperplasia and proliferation of endothelial cells[2]. Itappearswithin first few weeks of life and proliferate during infancy and resolves spontaneously in early childhood.

It can be classified as superficial, deep or mixed lesions and localized or segmental lesions. The superficial lesion appears as a solitary, raised bright red,firm, slightly compressible with size ranging from few millimeters to centimeters. Deep lesions appear as a bluish hue or skin colored whereas mixed lesions involves both epidermis and deeper subcutaneousregions.Localized lesions appear as noduleor plaques confined in a focal anatomic area,segmental lesions appear as larger and more frequently associated with developmental abnormalities [1].

IHs are often diagnosed clinically, but mostly misdiagnosed with other vascular abnormalities like capillary malformations, arteriovenous malformations, pyogenic granulomas, lymphatic malformations, dermoid cysts, spitz nevi, as well as non-involuting congenital hemangiomas[1]. Most IHs completely resolve with time, but many leave a small parchment-like scar,permanent scarring, ulceration, bleeding, or disfigurement[1]. In most cases, hemangiomas can be diagnosed based on history and physical examination[2].The color Doppler ultrasonography and/orMRI can be used to aid in the diagnosis.Many treatment modalities are currently available for management of head and neck hemangiomas, including careful observation, drug therapy, laser therapy,surgery,Cryosurgery,Radioisotope therapy[2].Various systemic and topical therapies have been studied in the treatment of IH[2].Propanol is the recommended first line drug which is well-tolerated and effective in all stages. Topical timolol has also been found to be efficacious, especially in early stages of IH, or on small thin lesions. Systemic glucocorticoids have been shown to halt tumour growth in the early proliferative phase, but are less effective at later stages[1].

Surgical intervention can be used in in patients withimpending life-threatening obstructive IHs or certain His which are unresponsive to pharmacologic therapy[3].The main advantage of surgery is that it leads to nearly the complete resolution of the haemangiomas, but it has risks of bleeding.Each type of therapy has its indications, contraindications, side effects and risks; therefore, the treatment of haemangiomas remains a challenge[4].Sclerotherapy is a simple, effective; yet largely unexplored treatment modality for infantile hemangioma. It acts by accelerating the regressionfunctions by slowing the progression of actively growing lesions.[5]

Conclusion:-

Infantile hemangioma is a common benign vascular tumor that occurs in infancy, typically presenting as a rapidly growing, well-circumscribed, raised, and bright-red lesion. Although infantile hemangioma often spontaneously regress without intervention, certain subtypes and locations may require treatment to prevent functional impairment, cosmetic disfigurement, or potentially life-threatening complications. The most common treatment options include oral or topical beta-blockers, corticosteroids, or surgery. In summary, early recognition and appropriate management of infantile hemangioma are critical for ensuring optimal outcomes for affected infants.

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