

Cellular Hemangioma in an adult: A case report

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Abstract

Hemangioma, which is a rife benign proliferative lesion with vascular tissue origin, is the most common vascular anomaly of infancy. Cellular hemangioma is one type of these tumors, known as the vascular channel formation of endothelial cells. This report describes a 34-year old man with an exophytic lesion on the lower lip, firm, dome shape, smooth surface with mild keratosis who came to us two months ago; histopathologic finding showed a relatively rare subtype of hemangioma, cellular hemangioma, which is characterized by the potential for recurrence and cellular immaturity. Among hemangioma subtypes, the most common are cavernous and capillary hemangiomas; a relatively rare subtype is cellular hemangioma, characterized by the potential for recurrence and cellular immaturity. CH most commonly involved parotid gland, but may also occur internally in the oral mucosa in infancy and early childhood. Mmucocele and pyogenic granuloma were considered in the differential diagnosis for our case.

Key Words: Hemangioma, Cellular hemangioma, lip.

Introduction

Hemangioma is a fairly common benign proliferative lesion of vascular tissue origin, which may present at birth or may arise during early childhood. Hemangioma is considered as a benign tumor of infancy that is characterized by a rapid growth phase with endothelial cell proliferation followed by gradual involution. The proliferation of the cells does not undergo malignant transformation. It appears as a pale macule with thread-like telangiectasia over the mucous membrane or skin. It is a painless soft tissue mass, smooth or lobulated, sessile or pedunculated with variable size and may be smooth or irregular bulbous in outline (1).

Cellular hemangioma is a tumor which is characterized by the formation of vascular tubes of endothelial cells. These tumors are differentiated from one another by the predominant cell type found on histopathologic examination. Cellular hemangioma is a rare tumor of the oral cavity (2).

Case Presentation

A 34-year-old man with a complaint of a mass on the lower lip referred to the dental school of Shahid Beheshti University in Tehran-Iran. This mass appeared two months ago, followed by lower lip biting and slow growth during two months. Clinical appearance showed an exophytic lesion, dome shape, smooth surface with mild keratosis, firm consistency, in the midline of the labial mucosa of the lower lip. (Fig. 1)

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Possible diagnosis was mucocele or pyogenic granuloma .Excisional biopsy was performed with punch no.8 and concurrent it, minor salivary gland removed .The specimen was send for histopathology evaluation.

Microscopic finding

The section showed a mucosal lesion consisted of numerous small endothelium-lined channels that engorged with red blood cell. The vessels were reorganized in lobular aggregation .The lesion was covered by parakeratinized stratified squamous epithelium. (Fig 2-4)



Figure 1. Clinical appearance

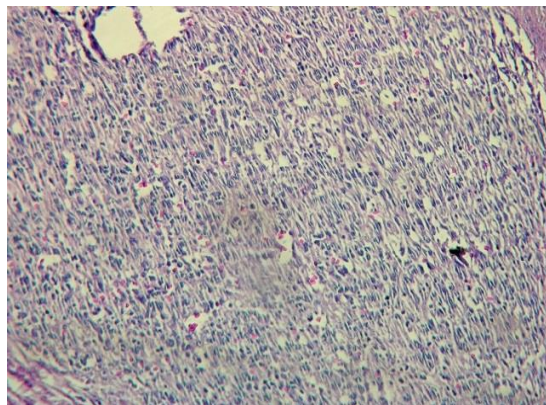


Figure 3. Histopathologic Section. (×200)

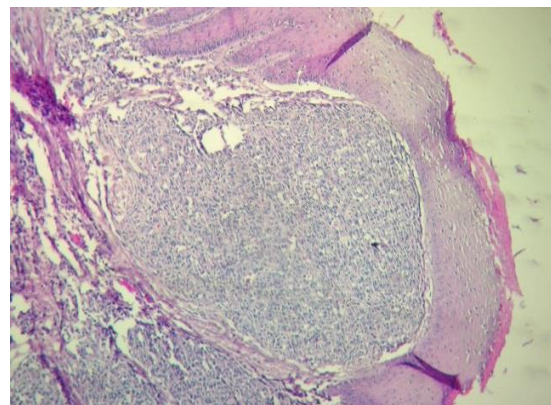


Figure 4. Histopathologic Section .(×100)

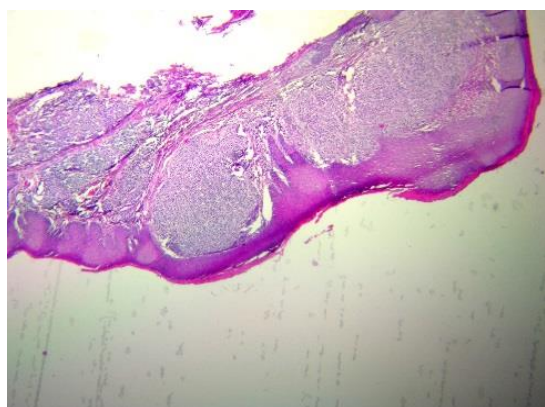


Figure 2. Histopathologic Section. (×40)

Discussion

Vascular lesions are the most common congenital abnormality that generally divided into two categories: Hemangioma and vascular malformations .The word hemangioma comes from Greek word, hema – ‘blood’, angeio – ‘vessel’, oma – ‘tumor’. This terminology has been widely used in medical and dental literature. Capillary hemangiomas have a 3:1 female to male ratio and in 80% of cases, hemangiomas occur as single lesions¹. Hemangiomas is a rapidly growing benign vascular tumor that often manifest in the neonatal period or during early childhood .commonly involving the skin and frequently affecting the oral cavity, specifically the oral mucosa , tongue , lips, and palate (3).

Among hemangioma subtypes, the most common are cavernous and capillary hemangiomas; a relatively rare subtype is cellular hemangioma, characterized by

Cellular Hemangioma

recurrence potential and cellular immaturity. Although hemangiomas are usually self-limiting, the most common complications are ulcerations, which can lead to hemorrhage, infection pain, and scarring⁴. Cellular hemangioma (CH) is an immature form of capillary hemangioma which increased cellularity (5). Histologically, cellular hemangioma shows combination of well-canalized and poorly canalized vessels (4). CH occurs during the first year of life and the various terms such as juvenile hemangioma and hypertrophic or infantile hemangioendothelioma have traditionally been used as a designation. In the head and neck, CH most commonly involved parotid gland, but may also occur internally in the oral mucosa in infancy and early childhood (5). mucocele and pyogenic granuloma were considered in the differential diagnosis for our case. Mucocele is a common lesion of the oral mucosa that results from an alteration of minor salivary glands due to a mucous accumulation. Diagnoses are principally clinical and the most common location of the mucocele is the lower lip. Mucoceles can affect the general population, but most commonly young patients (20-30 years old). Clinically they appear as a bluish, soft and transparent cystic swelling (6). A deep mucocele, on the other hand, may be intact and pink in color because of the thickness of the covering mucosa. If a mucocele is subjected to chronic irritation, its mucosal covering is inflamed or covered with a thickened layer of keratin (7). Pyogenic granuloma (PG) is a well-known and common benign mucocutaneous lesion that occurs as a reactive inflammatory hyperplasia due to local irritation or trauma. In fact, on the basis of the histological picture alone, it is invariably called lobular capillary hemangioma. Clinically, these lesions usually present as sessile papule or single nodule with smooth or lobulated surface, red, elevated and usually ulcerated. PG of the oral cavity is known to involve commonly the gingiva. It can occasionally occur on the lips, buccal mucosa, tongue and palate (8). The vascularity decreases over time and the lesion tends to become more collagenized and pink (9).

We report this case because of the rare incidence of cellular hemangioma in adults. According to our research only a case report of cellular hemangioma was exist (5). The age range, site and clinical feature in our

case was similar to case report by Tetsuo Shimoyama (5).

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