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### Case Report

# CAPILLARY HEMANGIOMA DISGUISED IN THE FORM OF MUCOCELE – A CASE REPORT

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## ABSTRACT

**Aim:** To report a case of capillary hemangioma which was manifesting as mucocele but on histopathological examination revealed capillary hemangioma.

**Background:** Haemangiomas are benign vascular tumours involving the head and neck region which is characterized by proliferation of blood vessels and usually seen in childhood. It is rarely seen in adults and associated with female propensity. Intraoral involvement by capillary haemangioma is rarely seen.

**Case Description:** A 28 years old female patient reported with a chief complaint of growth in right buccal mucosa for the past 3 months. There was associated history of trauma while playing with her child. There was no associated pain and bleeding. The lesion was reddish in colour, measuring 2×2mm, and soft in consistency with no tenderness on palpation. Excisional biopsy of the lesion was performed under local anaesthesia and sent for histopathological examination which revealed as capillary haemangioma. The lesion was not associated with any recurrence on further follow up.

**Conclusion:** Capillary hemangioma is rarely seen in oral cavity. The surgeon has to take utmost care while doing surgical excision because it may be associated with intraoperative and postoperative bleeding. Therefore, these lesions require legitimate clinical diagnosis and felicitous management.

**Clinical Significance:** Spontaneous regression is seen at an early age in some congenital lesions. In case of superficial lesions not associated with an aesthetic and function problem and they may be left untreated. Surgical excision can be done in case of small and superficial lesions. However, disfigurement may be seen in deep lesions. Utmost care should be taken preoperatively to counteract bleeding if in case it transpires.

**Keywords:** Capillary haemangioma, Mucocele, Case report, Surgical excision.

## INTRODUCTION

Haemangiomas are vascular benign tumours consisting of proliferating blood vessels which are classified histologically as capillary, mixed cavernous, or a sclerosing variety that tends to undergo fibrosis<sup>1</sup>. Clinically they are manifested as a soft mass, smooth or lobulated, sessile or pedunculated and range in size from a few millimetres to several centimetres. The colour varies from pink to red purple and shows blanching on pressure application. Oral haemangiomas are most commonly seen on the gingiva while cavernous variance is seen often at other sites<sup>2</sup>. Microscopically, capillary haemangioma (CH) consists of numerous small capillaries

lined by a single layer of endothelial cells supported in varying density of the connective tissue stroma<sup>3</sup>. Incidence of capillary haemangioma involving intraoral sites varies from 0.5 to 1.0% among all intraoral neoplasms<sup>4</sup>. Here we are reporting a striking case of capillary haemangioma which was analogous to mucocele on clinical presentation.

## CASE REPORT

A female patient of 28 years of age reported to our institute with the chief complaint of growth in right buccal mucosa for the past 3 months which was red in colour with dimensions of 2×2mm and associated with no pain or bleeding. The patient

gave history of trauma while playing with her child. The lesion was soft in consistency and non-tender on palpation with no associated pulsations felt (Figure 1).



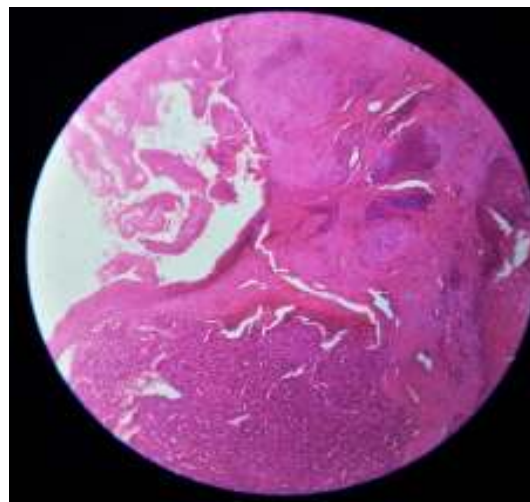
**Figure 1: Showing the lesion present in the right buccal mucosa comparable to a mucocele.**

So, based on the above findings and considering the location and nature of lesion, a differential diagnosis of mucocele, irritational fibroma, pyogenic granuloma was given. Patient's haematological report were within normal limits. Following this, excisional biopsy of the lesion was performed under local anaesthesia and closure was done with 3-0 black braided silk suture (Figure 2).



**Figure 2: Post excision and suturing done.**

The specimen was sent for histopathological examination. The histopathological report revealed "CAPILLARY HEMANGIOMA" showing foci of aggregated round cells two or three in number. The larger foci exhibit small capillaries with solid areas showing round cells. There was well delineated capsule seen separating it from the overlying epithelium which was comparably thinner in nature whereas the adjoining epithelium showed hyperplasia (Figure 3). The deeper connective tissue showed normal structure. The patient was recalled after 1 week for suture removal and regular follow up was done and no signs of recurrence were present.



**Figure 3: Histopathology image in 10 X magnification showing well delineated capsule, overlying epithelium, and small capillaries.**

## DISCUSSION

Haemangiomas are benign tumours of vascular origin usually seen in infancy (7%), affecting 12% of whites, but rarely seen in dark-skin population. The intraoral capillary haemangiomas are rare<sup>5</sup> and have incidence of 0.5-1.0% among intraoral neoplasms. especially with female predilection (ratio of 3:1) in second and third decades of life<sup>2</sup>. Matsumoto et al., in 2015, scrutinized 31 cases of intra oral capillary haemangioma and found that most of the lesions were seen on buccal mucosa (45.2%), followed by the tongue (35.5%), lip (9.7%), gingiva (6.5%), and palate (3.2%)<sup>6</sup>. Haemangiomas involving the lining mucosa of the lips is rare; in similar studies, only Yoshikawa et al<sup>7</sup> reported a sample of pedunculated cavernous haemangioma with clinical sign of irritation fibroma, and Sun et al<sup>8</sup> reported two cases of epithelioid haemangiomas on the lining mucosa of the lip. In the present case, taking into consideration of location and appearance of lesion, it was inclined towards the diagnosis of irritational lesion such as mucocele, irritation fibroma and pyogenic granuloma. In the present case, the lesion was treated by an excisional biopsy, which is the selective treatment of capillary haemangioma<sup>1,9</sup>. Surgical treatment may be associated with complications such as bleeding or recurrence. In the present case, surgical excision was associated with limited bleeding which was managed favourably by pressure application. The patient was kept under follow up and no recurrence is reported after surgery.

## CONCLUSION

Capillary haemangiomas are the major concern for the clinicians in regard to opting a treatment plan, as they resemble the irritational lesions such as mucocele, irritation fibroma or inflammatory hyperplasia. They can be associated with serious bleeding or recurrence if appropriate measures are not taken while managing these lesions.

## CLINICAL SIGNIFICANCE

Capillary haemangiomas are rarely seen in oral cavity and they usually mimic the irritational lesions of oral cavity and

can be misdiagnosed as irritational lesion. The management of such lesions by simple excision may lead to uncontrolled bleeding which may result in serious complications to patient's health. Dentist should take utmost care while managing these kinds of lesions with prompt diagnosis and felicitous treatment planning.

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