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Massive bleeding post extraction due to venous malformation: A critical case report

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Abstract

Arteriovenous malformations (AVMs) are exceptionally uncommon. Just 5% of them happens in the jaws be that as it may, they can show extreme bleeding which can be life-threatening. This case reports a 34-year-old moderately aged male with an enormous bleeding after tooth extraction which on facilitate examination was analyzed as low stream venous malformations. In spite of the fact that AVMs of the jaws are uncommon, they are every now and again uncovered through a monstrous bleeding amid tooth extraction. Dental specialists need to speculate them when young patients display some clinical highlights, as unconstrained gingival dying or unexplained dental portability.

Keywords: Malformation, extraction, bleeding, hemangioma

Introduction

Jaw's arteriovenous malformation are very rare pathologies but they can lead to dramatic bleeding and even death. AVMs are uncommon inconsistencies, which can be intrinsic or acquired [1]. Innate contortions, as in the present case, result from errors in vascular morphogenesis. Albeit half of AVMs happen in the head and neck region, just 5% concern the jaws. They affect preferentially the mandible than the upper jaw [2]. They are present during child birth yet may not be clinically apparent before the second decade. These pathologies are mind boggling, hard to fix, and potentially dangerous. Gelfand described AVM on dental panoramic radiography as multilocular radiolucency with honeycomb or bubble soap appearance [3], whereas Stafne thought they could be like any lytic bone lesions [9]. Differential diagnosis is then possible with several jaws lesions, as odontogenic cyst, ameloblastoma, keratocyst, odontogenic myxoma, central giant cell granuloma, fibrous dysplasia, malignant tumors or metastasis [4]. While basic gum draining is only here and there considered important, monstrous, throbbing gingival drain is frequently emotional and might be lethal. Hastened by a straightforward dental extraction or more vicious types of injury, control of monstrous discharge might be troublesome for the clinician, especially when the hidden cause is obscure or includes numerous improbable differentials analyze. We report the instance of a generous mandibular injury that justified a forceful approach due to conceivably lethal exsanguination. Hemangiomas happening in delicate tissues are normal and effectively analyzed through clinical information alone. Hemangiomas happening in bones are uncommon, representing just 0.7% of all rigid neoplasms and 10% of essential kind neoplasms happening in the skull.1 In the mandible, the tumor has a female: male transcendence of 3:1 and happens most every now and again in the bit of the body albeit condylar tumors have likewise been cited [5]. Differential judgments included hemangiopericytomas, arteriovenous (AV) contortions and aneurysmal bone sores. Hemangiopericytomas generally give fast development what's more, non-agonizing gingival swelling [6]. AV mutations have an inclination for age bunches in the blended dentition time frame and are related with unconstrained draining however normally present with a bruit or clear pulsation.4 Aneurysmal bone growths (ABC) likewise have quick development and gingival swelling however include torment from development of the hard cortex. The non-excruciating immovable draining being the sole indication displayed for the situation made its underlying finding convoluted since it looks like numerous odontogenic and non-odontogenic tumors.

Different side effects that are non-particular however may something else than the determination incorporate versatility of the nearby teeth, unhinging of impediment, non-difficult hard swelling and torment, at the point when introduce perhaps the main purpose behind patients to counsel [7].

Case Report

A 34-year old elderly male with no medical history came to emergency department with a chief complaint of profuse bleeding after extraction of left lower first molar one day before. He went to the local hospital in the same evening where the socket was sutured but bleeding persisted. On extra oral examination there was very mild swelling on the submandibular region on the left side. On intraoral examination the bleeding was persistent from the minor spaces from sutures and socket. The colour of blood was watery red and viscosity was very thin. The clot which was present was not in a proper jelly form but was like a blood soaked in foam. Tight Sutures were applied to close the socket properly. Tranexamic Pack was kept on the socket and patient was advised to bite it tightly for a period of at least one hour. Intravenous Revisc was also administered. Due to different nature of the blood Complete blood count was advised which was deranged. As per the clinical scenario of bleeding which was uncontrolled with deranged levels and submandibular swelling an ultrasonography of the submandibular region was taken to diagnose any pathology

which elicited a soft tissue lesion on the same area. Without any delay a Magnetic resonance imaging was advised which elicited a heterogenous hyperintense lesion with septations, cystic areas and few phleboliths in the left cheek with extensions favoring low flow venous malformation, venous hemangioma. (Figure 1 & 2) The case was then transferred to department of microvascular surgery for further management.



Fig 1: MRI Scan.

MRI SCAN OF LEFT LOWER JAW.

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SEQUENCES USED: T2 fse sag , T1, T2 trans, COR T2, STIR, T2 sag

Findings:-

- A heterogeneously hyperintense lesion (65x38x11 mm- APxMLxCC) with multiple septations, cystic areas with fluid-fluid layering and few T2 hypointense areas (phleboliths) noted in the left cheek. The lesion posteriorly compresses and mildly displaces the parotid gland and medially extends into the left parapharyngeal space, anteriorly extends about 1 cm behind the region of angle of mouth (orbicularis auris level), anteromedially to the lateral wall of maxilla, superiorly to the extra temporal scalp region and inferiorly up to the angle of the mandible. The lesion encases the atrophic tendon of the temporalis muscle. The lesion appear T1 isointense.
- No enlarged tortuous vessels leading to or within the lesion seen.
- Left masseter muscle is replaced by the lesion.
- Left submandibular gland is not visualised.
- Mandible appear unremarkable.
- No significantly enlarged nodes in the upper neck.
- Nasopharynx, pharynx and hypopharynx show no obvious pathology.
- Neck muscles appear normal.
- Normal flow void is not seen in the visualised internal jugular veins.

IMPRESSION

- A heterogeneously hyperintense lesion with septations, cystic areas and few phleboliths in the left cheek with extensions and relations as mentioned- Favoring low flow venous malformation, venous hemangioma.

(Suggest CEMRI / CT angiogram for further characterization)

Fig 2: MRI Report.

Conclusion

Though rare, mandibular hemangiomas should be considered in lesions involving the mandible. Diagnosis is difficult with an array of lesions that may appear clinically and radiographically similar. The non-specific signs and symptoms of mandibular hemangioma could lead to exsanguinating hemorrhage if no appropriate intervention is performed. We suggest that every bleeding case post dental extraction should be taken into extreme consideration to evaluate properly diagnose correctly and treat accurately.

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