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Radiographic findings of peripheral hemangioma and facial phleboliths: a case report

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ABSTRACT
Phlebolith is calcified thrombi within a vein often in the presence of hemangiomas or vascular malformations. This case report describes a 46-year-old female referring with a history of peripheral facial hemangioma who mentioned the lesions since her early childhood. In clinical facial examination, the blue-red exophytic lesions in the right side of the face were observed. Besides, multiple radiopaque phleboliths were observed in panoramic radiograph. In this patient, the absence of complete regression of hemangioma as opposed to the age, as well as the presence of pathognomonic radiopaque phleboliths were observed.
Keywords: Peripheral hemangioma, phlebolith, case report.

INTRODUCTION

Phlebolith is calcified thrombi within a vein often in the presence of vascular malformations or hemangiomas. The etiology is injury to the vessel wall or stagnation of the blood flow. Healing may involve formation of a protective thrombus which may be calcified.[1-3] Phleboliths are incidental findings, generally of no clinical importance. It may have either a radiopaque or radiolucent core. In the maxillofacial region, they are usually multiple and associated with hemangiomas. However, in this region, diagnosis of phlebolith requires its differentiation from other calcifications such as sialoliths, calcified lymph nodes, tonsilloliths, cysticercosis, and healed acne lesions.[1,2] Kakimoto et al.[4] showed that detection of phleboliths by computed tomography is easier than magnetic resonance imaging (MRI).

Hemangioma is lesion involving the vascular tissues. The mass of vessels is sharply recognized, but it is not encapsulated. It is made up of large vascular space filled with fluid blood.[5]
In this report, a patient with facial phleboliths and peripheral hemangiomas would be described.

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CASE REPORT

The patient was a 46-year-old female with no medical problem referred to the Department of Oral and Maxillofacial Radiology of Mashhad Faculty of Dentistry. Her chief complaint was tooth pain. Intraoral examination revealed poor oral hygiene and multiple decayed teeth. Panoramic radiograph revealed multiple remained roots and decayed mandibular left second molar demonstrating the chief complaint of the patient.

Multiple phleboliths were observed in panoramic radiograph (Figure 1). In extraoral examination, the multiple blue-red exophytic lesions in the right side of the face with extension from chin to the

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front of the ear were observed (Figure 2). These lesions resembled congenital facial hemangiomas which were present in her face from the early childhood with some regression during the time. Since these lesions had not induced discomfort or pain for the patient, no treatment or biopsy were done.

Figure 1. Radiographic view of the patient indicating radiopaque phlebolites (white arrow) and a remained root (black arrow).

Figure 2. Photograph of the patient indicating patient face and soft tissue lesions.

DISCUSSION

Phlebolith is most frequently found in pelvis area and head and neck region.[1,2] In the latter area, they may be found in 15-25% of intramuscular hemangiomas.[1,6]

The treatment protocol for the intramuscular hemangiomas is dependent on some clinical factors such as age of the patient, size and location, rapidity of growth, and subjective symptoms.[1] Some of therapeutic approaches include intralesional injections of sclerosing agents (e.g., Bleomycin A5, sodium sulfate tetradecyl, sodium morrhuate, and ethanolamine oleate), cryotherapy, corticosteroids (either intralesional or systemic corticosteriods), embolization, laser therapy, and continued observation.[3,7,8] In some cases, surgical excision may be considered as the treatment of choice which would also eliminate the phleboliths. McHeik et al.[9] has obtained good results with surgical excision of haemangiomas at early age.

Some case reports presenting the phleboliths in the maxillofacial area have been published. Sano et al.[10] in 1988 reported 2 cases of buccal hemangioma with phleboliths. After angiography, angio-xerography, and CT scan, surgical excision of the tumor was performed. Infrared spectrometry and x-ray diffraction confirmed that calcium carbonate and calcium phosphate as the main components of the phlebolith. Scolozzi et al.[11] reported an

intraoral venous malformation in the left retromolar area with multiple phleboliths. The interesting features of this case were the absence of complete regression of hemangioma as opposed to the age, as well as the presence of radiopaque phleboliths.

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