Intramuscular haemangioma of the levator anguli oris: a rare case

Angioma intramuscolare del muscolo elevatore dell’angolo della bocca: un raro caso clinico

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SUMMARY

Intramuscular haemangiomas are benign malformations of blood vessels occurring in skeletal muscles. Because of the rarity of these lesions, their deep location and variable clinical presentation, they often pose diagnostic difficulties. We herein present the first reported case of intramuscular haemangioma occurring in the levator anguli oris muscle. A 26-year-old man was referred to our Department for evaluation and management of a progressive swelling of the right cheek. Based mainly on the imaging findings, a preoperative diagnosis of intramuscular haemangioma was made and surgery was performed. During intervention, a highly vascular soft tissue mass was identified within the levator anguli oris muscle. The lesion was completely removed via an intraoral approach, and histopathological examination showed an intramuscular haemangioma.

KEY WORDS: Intramuscular haemangioma • Levator anguli oris

Case report

A 26-year-old man was referred to our Department for evaluation and management of a painless swelling of the right cheek (Fig. 1). The lesion had been present for 10 years and had gradually increased in size. The patient complained of cosmetic deformity. Clinical examination showed a diffuse mass situated about 2 cm superior to the right side of the upper lip. The lesion was soft, compressible, mobile and not adherent to skin. The overlying skin was slightly erythematous. No pulsation, bruits or thrills were noted. There was no evidence of neck lymphadenopathy.

A subsequent computerized tomography (CT) scan revealed a 4.6 × 1.9 cm soft tissue mass of the same density as muscle, arising from within the muscles of the cheek (Fig. 2). There was no underlying bone involvement of the upper jaw. Magnetic resonance imaging (MRI) showed...
heterogeneous, intramuscular lesion at the same location (Fig. 3). The mass was hyperintense to the masseter muscle on T2-weighted images. The imaging findings, history of long duration of the swelling and the clinical finding of discolouration of the overlying skin raised suspicion of a vascular lesion. On that basis, angiography was performed, and the patient underwent bilateral common carotid arteriography via the right femoral artery that confirmed the vascular nature of the lesion. In particular, the right common carotid injection showed that the mass consisted of a collection of tortuous vessels of varying calibre. Two main feeding vessels were detected, one originating from the right facial artery and another from the right internal maxillary artery (Fig. 4). Based on these findings, a provisional diagnosis of intramuscular haemangioma was made and surgery was scheduled. The lesion was removed via an intraoral approach under general anaesthesia. During intervention, a highly vascular soft tissue mass was identified within the levator anguli oris muscle. The lesion was excised together with a margin of the normal surrounding muscle to prevent recurrence. Several small feeding vessels were individually ligated by bipolar diathermy. Blood loss during the procedure was minimal, allowing for complete excision. The postoperative period was uneventful. The histopathological examination showed small vessels growing between fibres of skeletal muscle, consistent with a diagnosis of intramuscular haemangioma of small vessel (capillary) type. The patient remains free of symptoms and there is no evidence of postoperative recurrence at 6 months (Fig. 5).

Discussion

Intramuscular haemangioma is an uncommon vascular malformation, accounting for less than 1% of all haemangiomas. It affects mainly the trunk and extremities where the muscle volume is larger. Approximately 13% of these lesions present in the head and neck region. In the head, the masseter muscle is the most frequently involved site. Rarer sites include the orbicularis oris, depressor anguli

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Fig. 1. Clinical appearance of the lesion.

Fig. 2. Axial CT showed the presence of a soft tissue mass arising within the muscles of the right cheek.

Fig. 3. Coronal T2-weighted MRI revealing a heterogeneous, intramuscular lesion.

Fig. 4. Arteriogram of right external carotid artery showing the two feeding vessels of the lesion.

Fig. 5. Appearance of the patient at 6 months after surgical excision of the tumour mass.
In conclusion, the possibility of an IMH should be included in the differential diagnosis of any facial mass. The appropriate radiologic examinations can enhance accurate preoperative diagnosis and optimal treatment planning. Surgical resection, well beyond the gross limits of the lesion, is generally considered the ideal therapeutic approach for IMH.

References


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