

One Minute Ophthalmology

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Unilateral enophthalmos

Case

A 55-year-old Caucasian lady with a history of breast carcinoma noted increasing pain and pressure in the right eye (OD) for 1 year. She had an upper tooth dental implant about 1 year ago after which the symptoms started. On examination, best corrected visual acuity was 20/25 OD and 20/20 in the left eye (OS). Motility and color plates were full. There was no optic nerve edema or pallor in either eye (OU). There was 2 mm enophthalmos OD on Hertel exophthalmometry and no proptosis with and without Valsalva maneuver [Fig. 1a].

What is Your Next Step?

- A. Close monitoring with serial examinations every 3 months
- B. Perform orbital magnetic resonance imaging (MRI)
- C. Obtain blood work for inflammatory markers
- D. Initiate metastatic evaluation.

Findings

Computed tomography imaging was performed which showed curvilinear density of the right retrobulbar region confluent with the inferior rectus (IR) muscle, extending to the superior rectus (SR) complex [Fig. 1b]. Magnetic resonance imaging (MRI) revealed a muscular band between the right IR and SR muscles OD [Fig. 1c]. The patient was managed conservatively with repeat imaging ordered in 3 months.

Diagnosis

Orbital bands.

Correct Answer: B

Discussion

Orbital bands—also known as supernumerary extraocular muscles—are anomalous muscle attachments between rectus muscles or a rectus muscle and the globe.^[1] The etiology of these bands is unclear, but may represent extraocular muscle tissue that was never innervated or lost innervation during development.^[2] The impact of the accessory bands depends upon the size and location, and can cause restrictive strabismus and globe retraction.^[2] Other causes of enophthalmos must be ruled out. For asymptomatic patients, ocular management involves observation followed by serial imaging, preferentially orbital MRI coronal view T-1 and T-2 weighted images with/without fat suppression and surface coil for higher resolution.^[3]

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be

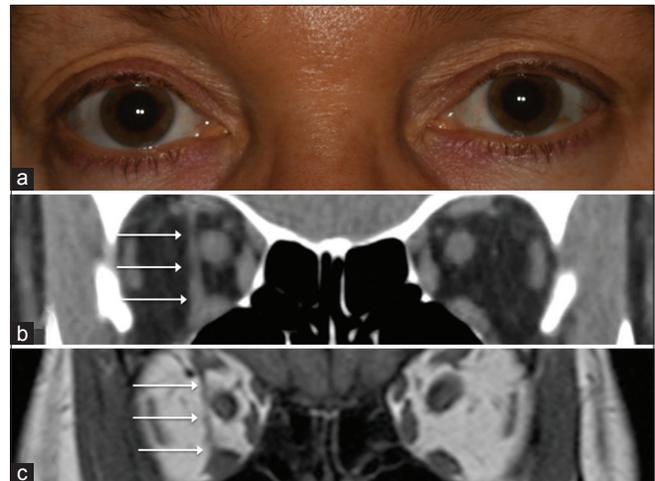


Figure 1: External photograph revealed unilateral enophthalmos OD in a Caucasian female (a). CT scan showed a density connecting the inferior and superior recti muscles (b). MRI confirmed a muscular band (c)

reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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