Orbital Venous Malformation

Orbital Venous Malformations can be located in the periorbital or orbital regions. A VM in the orbit can be in the intraconal orbital compartment or extraconal (pre- or postseptal).

MRI plays an important role in the initial diagnosis of VMs due to the modality's large field of view and multiple sequences. Contrast enhancement is helpful in separating components of the differential diagnosis, while US is helpful at determining the internal architecture of the lesion and guiding needle placement for biopsy or sclerotherapy.

Treatment

Orbital Venous Malformation Treatment

Case reports

Orbital Venous Malformation Accompanied by Arteriovenous Fistula [1].

A case report highlights intermittent proptosis precipitated by exercise or Valsalva maneuvers. Conventional orbital computed tomography scan and catheter angiography did not disclose any orbital vascular lesion. Orbital B-scan ultrasonography, however, before and after a Valsalva maneuver demonstrated intermittent orbital vein dilation adjacent to the optic nerve of the left eye. Clinicians should be aware that anatomic venous variations and vascular malformations including orbital varices may produce a characteristic symptom of recurrent proptosis with Valsalva or head position. Conventional structural orbital imaging (e.g., computed tomography or magnetic resonance imaging) may not demonstrate a lesion [2].

1)
Byeon HJ, Park KY, Yoon JS, Ko J. Orbital Venous Malformation Accompanied by Arteriovenous Fistula. Korean J Ophthalmol. 2020;34(4):343-345. doi:10.3341/kjo.2020.0043
2)
Wang R, Al Othman B, Kini A, Lee AG. Dilated orbital vein causing Valsalva-induced proptosis. Proc (Bayl Univ Med Cent). 2020;33(2):281-282. Published 2020 Mar 5. doi:10.1080/08998280.2020.1727708