

Ophthalmological signet ring sign by a glaucoma implant

A 58-year-old man with right eye uveitic glaucoma was successfully implanted an Ahmed valve (New World Medical, Rancho Cucamonga, CA, USA) to control his intraocular pressure. Glaucoma drainage device, with increasing popularity,^[1] would show up on radiological imaging,^[2] and be mistaken as foreign body,^[3] especially with its size, superior location to the eye,^[4] and heterogeneous radiodensity throughout. The Ahmed valve appears as a signet ring on computed tomography [Fig. 1]. The difference in radiodensity of the polypropylene body from the remaining silicone part outlines its ring-shaped appearance. This is more obvious especially with 3D reconstruction [Fig. 2], making it a signature of glaucoma implant.

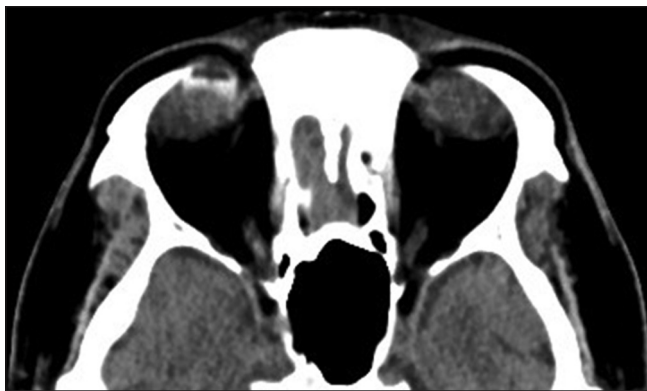


Figure 1: Computer tomography of orbit showing the right eye implanted Ahmed valve (model FP7). Its radiopaque polypropylene body appears as a signet ring. 3D reconstruction was done with OsiriX. Note also evidence of right craniotomy over the skull bone



Figure 2: Computer tomography of orbit with 3D reconstruction by OsiriX showing the right eye implanted Ahmed valve (model FP7) appearing as a ring. Note also evidence of right craniotomy over the skull bone

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 The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.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

1. Vinod K, Gedde SJ, Feuer WJ, Panarelli JF, Chang TC, Chen PP, *et al.* Practice preferences for glaucoma surgery: A survey of the American glaucoma society. *J Glaucoma* 2017;26:687-93.
2. Reiter MJ, Schwoppe RB, Kini JA, York GE, Suhr AW. Postoperative imaging of the orbital contents. *Radiographics* 2015;35:221-34.
3. Mabray MC, Uzelac A, Talbott JF, Lin SC, Gean AD. Ex-PRESS glaucoma filter: An MRI compatible metallic orbital foreign body imaged at 1.5 and 3T. *Clin Radiol* 2015;70:e28-34.
4. Leen MM, Witkop GS, George DP. Anatomic considerations in the implantation of the Ahmed Glaucoma valve. *Arch Ophthalmol* 1996;114:223-4.

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