

Torpedo maculopathy with double torpedoes

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Case Report

A 6-year-old male presented with defective vision in both eyes. Unaided vision was 6/36 in the right eye and

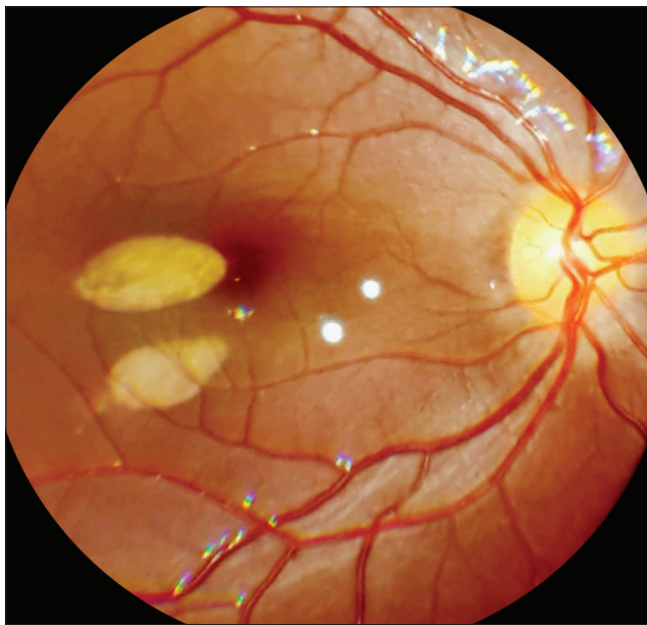


Figure 1: Fundus photograph taken with a smartphone fundus documentation technique (DIYretCAM) showing double torpedoes. The superior torpedo is in the classic location as described in torpedo maculopathy. Note the frayed tail temporally in the inferior torpedo. The two white dots are reflection artifacts seen with smartphone fundus documentation techniques

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6/18 in the left eye. Best-corrected visual acuity improved to 6/18 with a correction of -2.00 DC at 180° in the right eye and to 6/9 in the left eye with -1.25 DC at 160° . Anterior-segment evaluation was unremarkable. Fundus evaluation in the right eye showed two torpedo-shaped lesions. The first torpedo lesion was typical of torpedo maculopathy [Fig. 1].^[1] The second lesion was half-a-disc diameter inferior and almost parallel to the first lesion, with a closer resemblance to a "torpedo." The second torpedo had a frayed tail temporally. Fundus evaluation in the left eye was within normal limits [Fig. 2]. Optical coherence tomography (OCT) of the superior torpedo showed Type I morphologic characteristics [Figs. 3 and 4]. The second lesion had attenuation of outer retinal layers along with a cavitation, consistent with the OCT appearance of a Type II lesion [Figs. 4 and 5]. The occurrence of double torpedoes in torpedo maculopathy has not been reported.

The exact pathogenesis of torpedo maculopathy is unknown. The current hypotheses by Pian *et al.*,^[2] Shields *et al.*,^[3] and Golchet *et al.*^[4] are based on the consistent location of the lesion. However, these hypotheses cannot explain the presence of double torpedoes, the second torpedo being away from the horizontal raphe, the site of the fetal bulge, and the emissary canal of the long posterior



Figure 2: The left eye was normal clinically as well as on optical coherence tomography

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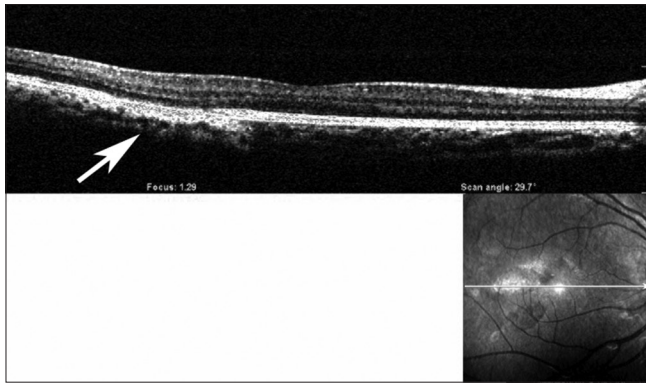


Figure 3: Optical coherence tomography of the first torpedo shows attenuation of outer retinal layers with thickened retinal pigment epithelial – Bruch's membrane complex described as Type I optical coherence tomography features of torpedo maculopathy (arrow)

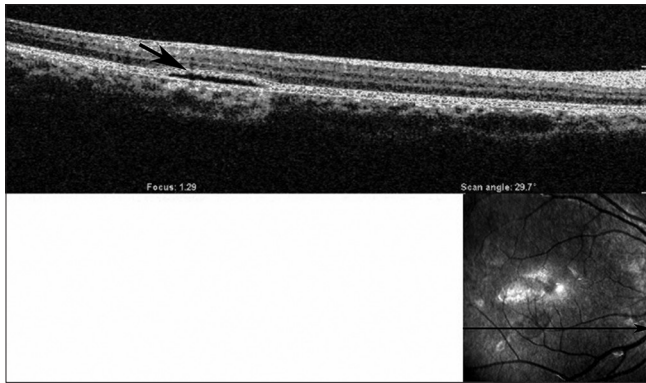


Figure 5: Optical coherence tomography of the second torpedo shows presence of a subretinal cleft or outer retinal cavitation along with attenuation of outer retinal layers described as Type II features of torpedo maculopathy (arrow)

ciliary artery and nerve. OCT angiographic findings have pointed toward abnormalities of the choroidal vasculature, and the presence of double torpedoes seems to support this hypothesis.^[5]

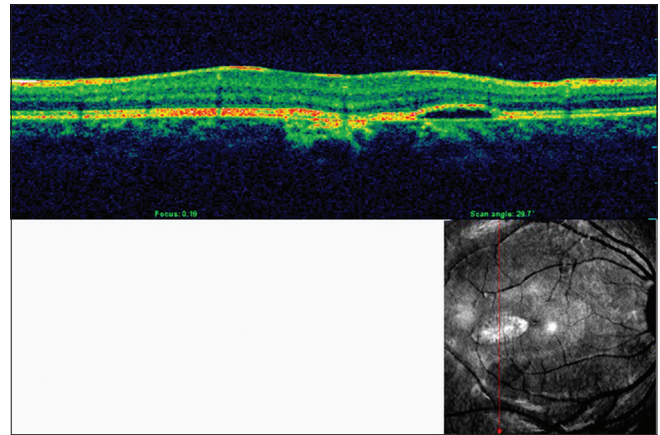


Figure 4: The vertical scan on optical coherence tomography passing approximately through the centers of both lesions showing the Type I and the Type II characteristics of the superior and inferior torpedoes, respectively

Conclusion

This is unique case of double torpedoes in torpedo maculopathy.

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Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Paulose RM. Torpedo maculopathy. *Kerala J Ophthalmol* 2017;29:223-5.
2. Pian D, Ferrucci S, Anderson SF, Wu C. Paramacular coloboma. *Optom Vis Sci* 2003;80:556-63.
3. Shields CL, Guzman JM, Shapiro MJ, Fogel LE, Shields JA. Torpedo maculopathy at the site of the fetal "bulge". *Arch Ophthalmol* 2010;128:499-501.
4. Golchet PR, Jampol LM, Mathura JR Jr., Daily MJ. Torpedo maculopathy. *Br J Ophthalmol* 2010;94:302-6.
5. Chawla R, Pujari A, Rakheja V, Kumar A. Torpedo maculopathy: A primary choroidal capillary abnormality? *Indian J Ophthalmol* 2018;66:328-9.