# INCIDENTAL FINDING OF LEFT EYE TORPEDO MACULOPATHY IN A FEMALE PATIENT WITH HLA-B27 POSITIVE ANTERIOR UVEITIS

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## PURPOSE

To present a case of left eye torpedo maculopathy in a young female patient with bilateral HLA-B27 positive anterior uveitis (AAU) and provide a brief overview of this rare retinal lesion.

## MATERIALS-METHODS

Retrospective review of the patient's scanned paper records and electronic records

## CASE PRESENTATION

- ❑ 21-year-old female patient
- ❑ 1st episode of bilateral AAU in February 2023, treated successfully with tapering course of topical steroids given at our Eye Emergency Department
- ❑ Subsequent referral to the Uveitis Clinic and review in clinic
- ❑ History of joint pains, swelling and morning stiffness
- ❑ ***Patient was found to be HLA-B27 positive***
- ❑ No other past ophthalmic history of note (no eye trauma, ophthalmic surgery, squint, or amblyopia)
- ❑ Strong family history of ankylosing spondylitis (AS) with father and paternal uncle suffering from the disease and being also HLA-B27 positive
- ❑ Patient seen by Rheumatology Team: AS excluded
- ❑ Toxoplasma serology was negative

## OPHTHALMIC EXAMINATION ON INITIAL VISIT

- Visual acuity: 6/6 both eyes on Snellen chart
- Intraocular pressures: Within normal limits
- Anterior segment examination: Unremarkable (No synaechiae, no keratic precipitates, hypopyon or iris atrophy)
- Clear crystalline lenses and vitreous cavities in both eyes
- Dilated fundus examination and OCT scan of right eye: Unremarkable
- Dilated fundus examination of left eye: **Presence of a hypopigmented flat bullet-shaped lesion temporally to the left fovea along the horizontal raphe was noted (See figures 1 and 2 in the next slide)**.

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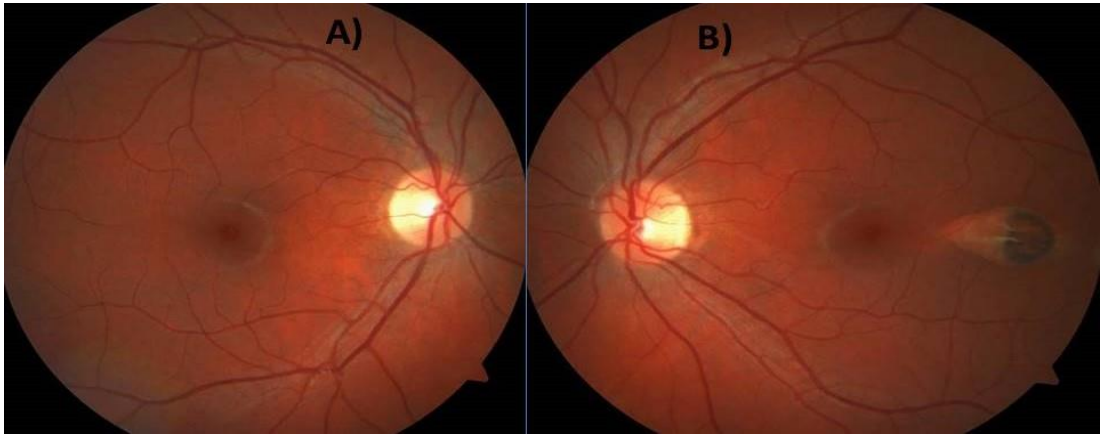


**Figure 1. From left to right: 1A) Colour fundus photograph of the right eye. The fundus appearance is unremarkable 1B) Colour fundus photograph of the left eye. Note the hypopigmented flat bullet-shaped lesion temporally to the left fovea along the horizontal raphe, which is compatible with the diagnosis of torpedo maculopathy.**

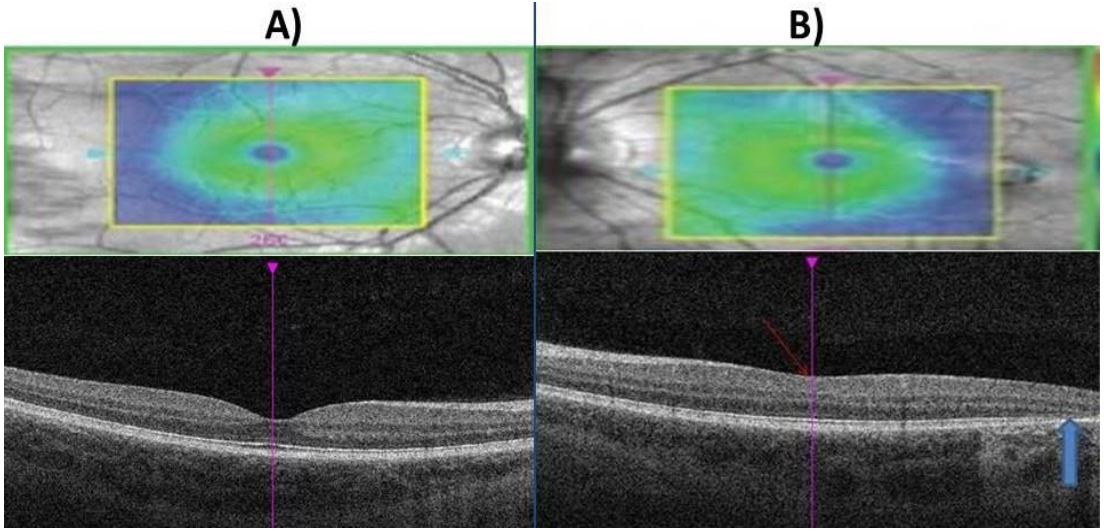


**Figure 2. From left to right: 1A) OCT macula scan of the right eye. The OCT appearance is unremarkable 1B) OCT macula scan of the left eye. Note the thin red arrow showing a normal foveal contour with intact sub-foveal ellipsoid/outer retina layer. Temporally to the fovea, note the thicker blue arrow showing the loss and attenuation of the ellipsoid/outer retina layer accompanied by reverse shadowing. No signs of secondary CNV were present on dilated fundus examination and on OCT scan.**

## DISCUSSION

Torpedo maculopathy is a rare lesion typically presenting as a hypopigmented flat lesion temporally to the fovea along the horizontal raphe without direct foveal involvement. Therefore, the vision is less likely to be affected and usually the lesion is discovered incidentally.

Differential diagnosis includes toxoplasma chorioretinal scarring, old trauma, congenital RPE lesions (including congenital RPE hypertrophy, Gardner syndrome-associated congenital RPE hypertrophy, or congenital RPE albinotic spots, tumours (including RPE hamartoma, combined RPE-retinal hamartoma), or hereditary retinal dystrophies (including vitelliform dystrophy or pattern dystrophies).

To date, the exact pathophysiological mechanism of this lesion has yet to be determined. In addition, there is no established association with any other systemic conditions, including HLA-B27 associated AAU. This lesion usually has a good visual prognosis. Rarely, it can be complicated by a secondary CNV. Based on our literature search, only four cases with CNV secondary to torpedo maculopathy have been published so far.

## CONCLUSIONS

In our case, the left eye fundus lesion had the typical morphological characteristics published in the literature and was discovered incidentally on routine dilated fundoscopy, which is consistent with the data published in the current literature. The patient has had a couple of flare-ups of anterior uveitis which have been successfully managed with tapering course of topical steroids. The lesion has remained unchanged over the course of time and the acuity has remained at the level of 6/6 on Snellen chart.

Our case highlights the importance of performing dilated fundoscopy even in cases of AAU (including HLA-B27 related AAU) that do not typically involve the posterior segment, document the retinal findings, and provide the appropriate explanations and reassurance to these patients. This is of paramount importance for medicolegal purposes and for maintaining continuity of care.

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