

Near full thickness macular hole with an intact overlying internal limiting membrane following resolution of fulminant acquired toxoplasma retinitis -A unique finding

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A 43-year-old immunocompetent male presented with focal macular retinitis with overlying vitritis in the right eye. His BCVA was counting fingers close to face. OCT showed increased intraretinal thickness at the area of retinitis with adjacent hypo reflectivity of the choroid. Serology was positive for IgM and IgG antibodies for toxoplasma. He received oral clindamycin 300 mg 4 times/day for 8 weeks. At 6 weeks, his BCVA was CF 2 metres. Fundus showed complete resolution of retinitis with formation of

near, full thickness macular hole with intact overlying ILM. A small hyper reflective scar was seen at the base of the macular hole.

Key words: Acquired, inner limiting membrane, macular hole, retinitis, toxoplasma

We report an unusual resolution of acquired, focal, macular, toxoplasma retinitis by destruction of retinal tissue, and formation of a near thickness macular hole with an intact overlying internal limiting membrane (ILM). This is an unusual clinical and OCT finding and has not been described before.

Case Report

A 43-year-old immunocompetent male presented to us with diminution of vision in the right eye of 2 weeks duration. On examination, his BCVA was counting fingers (CF) close to face in the right eye and 20/20 in the left eye. Fundus examination of the right eye showed focal macular retinitis with overlying vitritis [Fig. 1a]. Optical coherence tomography (OCT) showed increased intraretinal thickness at the area of retinitis with corresponding underlying hypo reflectivity of the choroid possibly due to shadowing effect [Fig. 1b]. Left eye examination was normal. Intraocular pressures were in the normal. Range. Enzyme linked immunosorbent assay (ELISA) was positive for IgM and IgG (210 IU/L) antibodies for toxoplasmosis confirming the diagnosis of acquired toxoplasma retinitis in the right eye. Other laboratory investigations including complete haemogram, venereal disease research laboratory (VDRL), treponemal pallidum haemagglutination test (TPHA), Weil-felix test, ELISA for HIV, mantoux test, random blood sugar, urine routine, and chest X-ray were noncontributory.

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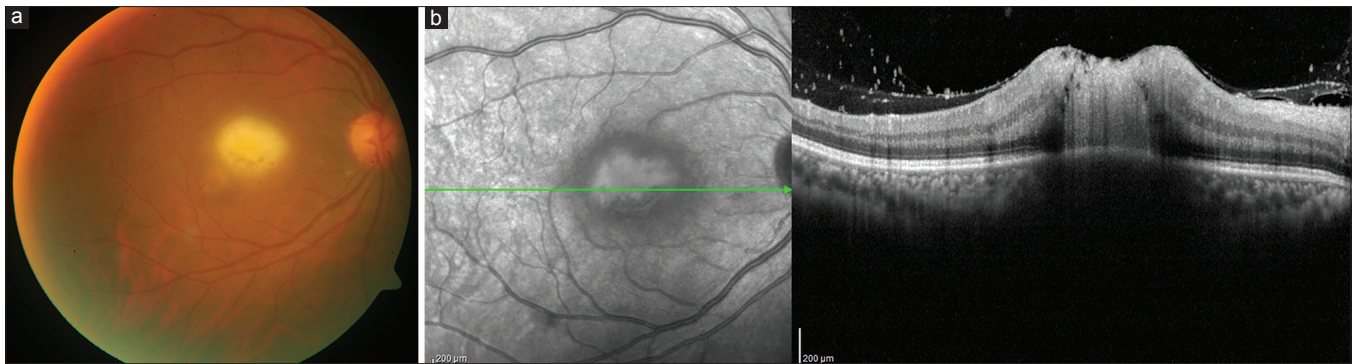


Figure 1: Fundus photograph of the right eye at presentation showing macular retinitis (a). Spectral OCT shows increased intraretinal thickness at the area of retinitis with corresponding underlying hypo reflectivity of the choroid (b)

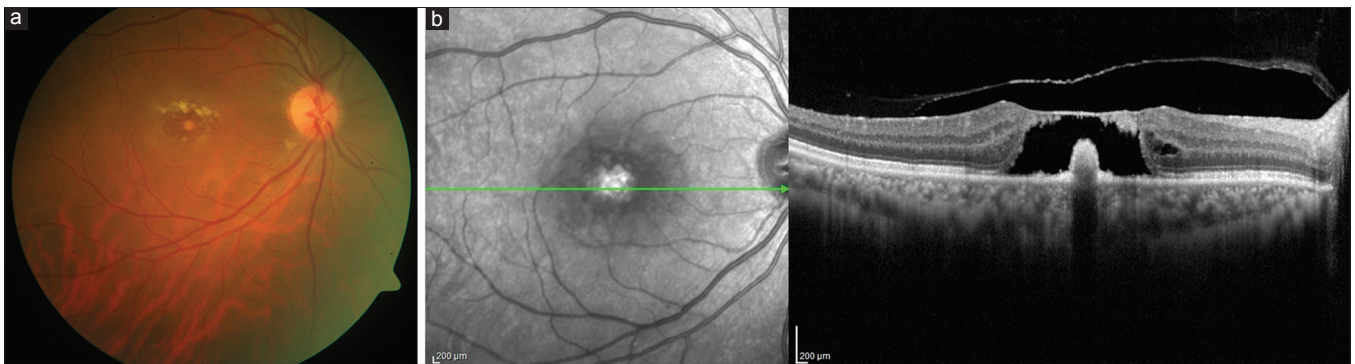


Figure 2: Fundus photograph of the right eye at the end of 3 weeks showing near complete resolution of retinitis with total loss of intraretinal tissue (a) and an intact overlying ILM or bridge sign on spectral OCT (b). Also seen is edema along the margins of the macular hole and a hyperreflective scar at the base of the macular hole

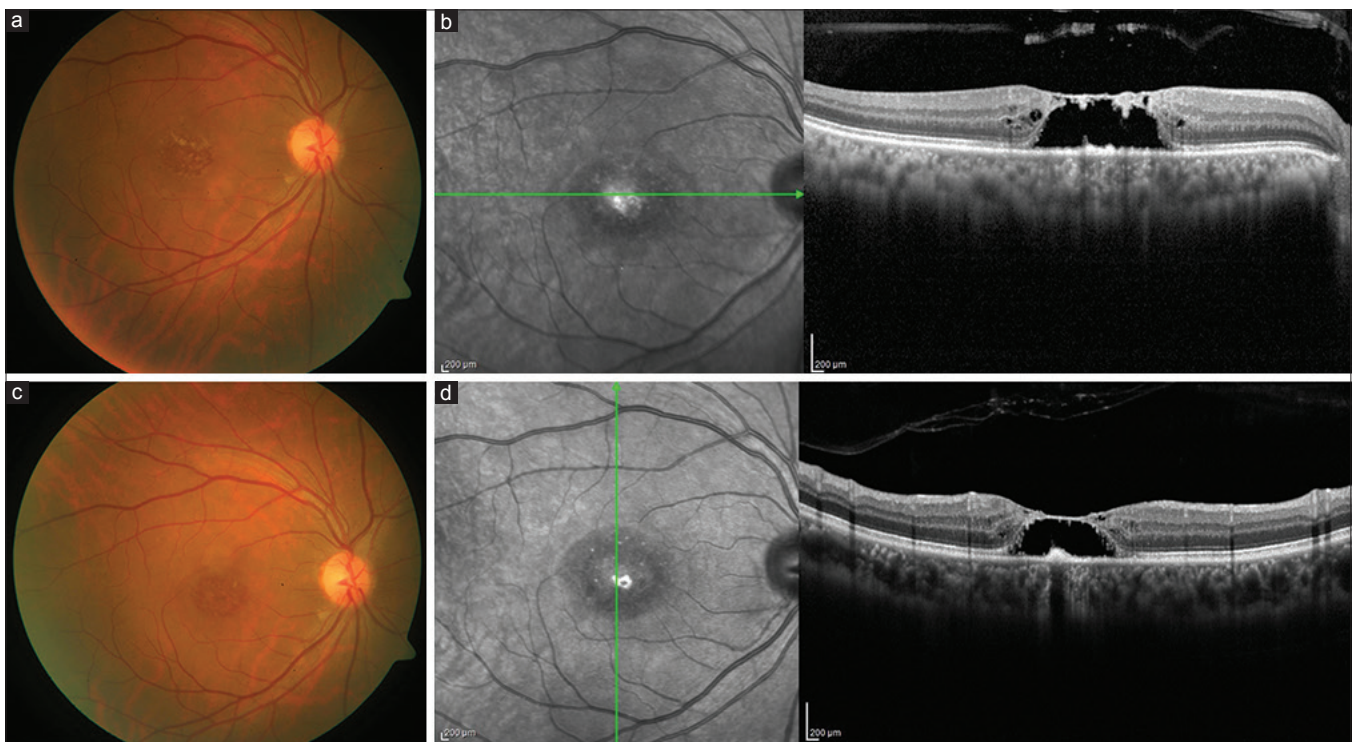


Figure 3: Fundus photograph of the right eye at 8 weeks (a) and 6 months (b) showing total loss of intraretinal tissue with complete resolution of retinitis with an overlying intact ILM—the bridge sign at 8 weeks (c) and at 6 months (d) on spectral OCT

Treatment included oral clindamycin 300 mg, qid for 8 weeks. Oral steroids were started 3 days after starting clindamycin and tapered by 10 mg/week over 4 weeks. At 3 weeks, his BCVA had improved to CF 2 meters. Fundus examination showed near complete resolution of retinitis with formation of near full thickness macular hole. [Fig. 2a] OCT confirmed loss of macular tissue with intact overlying ILM akin to a "bridge sign". A small hyperreflective scar was seen at the base and edema noted at the margins of the macular hole. [Fig. 2b] At 8 weeks there was complete resolution of retinitis with loss of intraretinal tissue with intact overlying ILM. [Fig. 3a and b] At 6 months, his BCVA remained stable at CF 2 meters with complete loss of intraretinal tissue with overlying intact ILM or the bridge sign on the OCT [Fig. 3c and d].

Discussion

Macular hole following toxoplasma retinitis secondary to vitreous traction have been described.^[1-3] Macular infarction has been described in toxoplasma retinochoroiditis.^[4] In this case, we speculate that the retinitis was fulminant and had caused destruction of the macular tissue resulting in a near full thickness macular hole. This unusual pattern of resolution of retinitis with sparing of the overlying ILM, resulted in a "bridge sign" on the OCT. This "bridge sign" pattern on OCT has been described in idiopathic parafoveal telangiectasia.^[5] A small scar was also seen at the base of the macular hole in our case on OCT.

Conclusion

Unusual pattern of resolution of retinitis with the characteristic finding of "bridge sign" on OCT is unique and has not been described before in toxoplasma retinitis.

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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