Paracentral acute middle maculopathy in a healthy pregnant woman

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ABSTRACT

Paracentral acute middle maculopathy (PAMM) is a rare retinal disorder characterised by diffuse lesions at the inner nuclear layer (INL) on spectral-domain ocular coherence tomography (SD-OCT). Extensive investigations are often required to rule out all the systemic risk factors as PAMM is associated with various retinal vascular diseases. A 32-year-old primigravida in her first trimester with no known medical illness, presented with right temporal paracentral scotoma for one week. Visual acuity was 6/6 bilaterally, with no relative afferent pupillary defect. Anterior segment examination was unremarkable with

normal intraocular pressure of 14mmHg. Fundus examination revealed a slight elevation over the right nasal fovea. Left eye fundus was unremarkable. She was noted to have an enlarged blind spot on the visual field test of her right eye. OCT of the macula revealed a hyper-reflective band nasal to the fovea which involving the INL, consistent with PAMM. OCT angiography (OCT-A) showed flow attenuation corresponding to the site of lesion. However, systemic workups for hypertension, diabetes mellitus and dyslipidaemia were unremarkable. A final diagnosis of PAMM was made based on the findings on OCT and OCT-A macula. The symptoms persisted throughout her pregnancy and postpartum, however, the severity gradually decreased. Meanwhile, there was complete resolution of the hyperreflective band which was previously seen on OCT and OCT-A macula. PAMM is an uncommon cause of scotoma but is possible in a healthy pregnant lady with no ocular and vascular systemic risk factors. OCT and OCT-A should be performed to look for the characteristic changes at the INL while the systemic work-up may help to exclude systemic and cardiovascular risk factors.