DESCRIPTION
A 55-year-old female housewife presented with floaters in both eyes. The patient had no significant medical history and was not on any medications, and reported no known drug allergies. The patient had no significant family history. History of night blindness was noted. Fifteen years back, the patient underwent refractive corrective surgery for high myopia. On ocular examination, her best corrected distant visual acuity in the right eye was 20/25 and in the left eye was 20/30 with near visual acuity of 6/6 in each eye. Her external examination which included facial symmetry, external face, head posture, ocular position and ocular alignment was normal. Pupil and anterior segment examination were unremarkable. Goldmann applanation readings were 14 mm Hg in the right eye and 12 mm Hg in the left eye. Ophthalmoscopic examination through dilated pupil revealed clear media in each eye.

Fundus examination of each eye showed peripapillary chorioretinal atrophy extending to involve temporal vascular arcade forming an annular pattern and sparing fovea. The area of atrophy extended nasal to the disc in both eyes. Atrophy was more extensive in the right eye compared with the left eye. The disc was healthy and there was no arterial attenuation or no bony spicules. Peripheral fundus examination was unremarkable (figure 1A and B).

Autofluorescence (Optos, Marlborough, Massachusetts, USA) image of each eye showed loss of autofluorescence along with chorioretinal atrophy. There was a perifoveal hyperautofluorescence in both eyes (figure 1C and D).

Electroretinogram (Metrovision, Pérenchies, France) of each eye showed a reduction in scotopic and photopic a-wave and b-wave and a significant reduction in 30 Hz flicker response with delayed implicit time (figure 2).

Humphrey visual field 30-2 of both eyes showed generalised depressed points, more in the pericentral area in both eyes (figure 3).

Swept source optical coherence tomography (Triton, Topcon, Tokyo, Japan) image of each eye showed normal fovea contour with normal outer and inner retinal structures. However, there was loss of architecture in the area of annular chorioretinal atrophy. Choroidal thinning was noted in each eye (figure 4).

Optical coherence tomography angiography (OCTA) showed normal superficial capillary plexus...
with a significant reduction in deep capillary plexus and loss of choriocapillaris in the affected area of atrophy in both eyes (figure 5).

Based on the above findings, final diagnosis of posterior polar annular choroidal dystrophy (PPACD) was made.

Primary choroidal dystrophies which affect the central macula are referred to as central areolar choroidal dystrophy, posterior polar central choroidal dystrophy, posterior polar annular dystrophy, posterior polar hemispheric dystrophy and central and peripheral annular choroidal dystrophy.3 4 PPACD is a rare type of choroidal dystrophy which affects the retina and choroid in an annular pattern.2

These dystrophies represent a distinct group of disorder involving bilateral outer retinal, retinal pigment epithelium and choriocapillaris atrophy with a characteristic fundoscopic pattern.3 4 5 PPACD is a rare type of choroidal dystrophy which affects the retina and choroid in an annular pattern.2

Thick bilateral involvement was seen in all cases, asymmetricity is common.5 As in our case, the right eye was more involved than the left eye.

The fovea was spared in all reported cases, except one report shows cystoid macular oedema in both eyes in case of PPACD.6

Arcuate scotoma corresponding to chorioretinal atrophy area on Humphrey visual field was reported by co-author in his previous report.5 In our case also there was generalised depressed points more in the paracentral area corresponding to the area of chorioretinal atrophy (figure 3A and B).

Role of OCTA was first described by co-author in his previous report. He reported that the deep capillary plexus of the retina was significantly reduced with the absence of choriocapillaris plexus in the affected areas. He also reported that the choriocapillary vascularity was reduced in the deeper choroid in the affected areas.5

In our case also there were loss void signals in chorioretinal slab showing atrophy of choriocapillaris in both eyes.

Though it is a choroidal disease, electroretinography (ERG) finding shows that there is diffuse dysfunction of photoreceptors as described by co-author in his previous report.6

To conclude, PPACD is a rare entity. Patients usually maintain relatively good vision as fovea is spared. Some patient may experience a field defect, but it has not been reported symptoms.

REFERENCES
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