

## Juxtapillary choroidal excavation with polypoidal choroidal vasculopathy: An unusual association

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**Key words:** Choroidal excavation, optical coherence tomography, optical coherence tomography angiography, polypoidal choroidal vasculopathy

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Choroidal excavation is a recently described entity.<sup>[1]</sup> Focal choroidal excavation (FCE) with PCV has been reported before.<sup>[2]</sup> Optical coherence tomography angiography (OCT-A) features of PCV have also been described.<sup>[3]</sup> Hereby, we describe clinical and imaging features of juxtapapillary choroidal excavation (JCE) with PCV. To the best of our knowledge, JCE and PCV have not been reported together before.

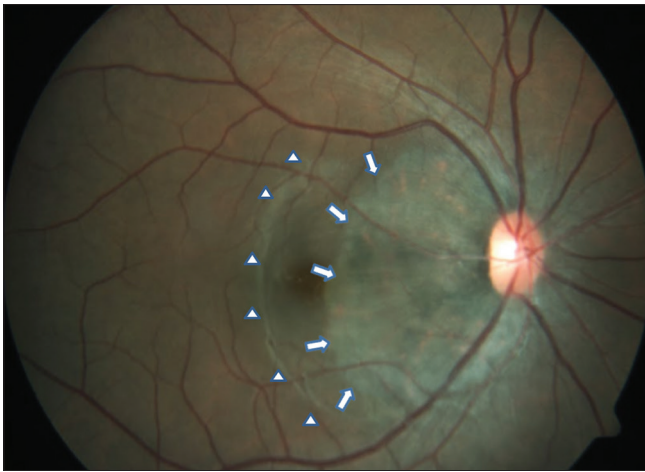
### Case Report

A 27-year-old lady presented with decreased vision in right eye, of 3-year duration. Best corrected visual acuity was 20/60. Left eye was normal. Fundus examination revealed juxtapapillary retinal pigment epithelium-choroidal atrophy [Fig. 1] with overlying subretinal fluid [Fig. 1], and cystoid macular edema. Clinical findings were confirmed with swept-source OCT [Fig. 2]. A hyperreflective polypoidal lesion was seen within area of choroidal excavation [Fig. 2]. Fundus fluorescein angiography showed diffuse hyperfluorescence corresponding

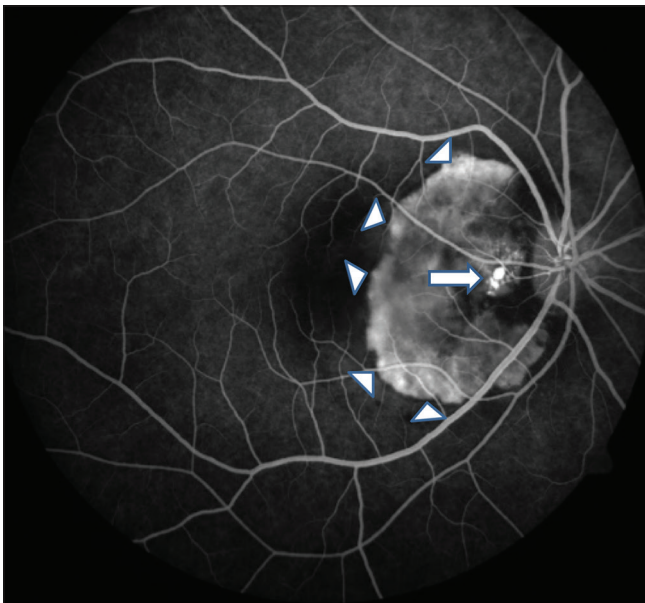
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**Figure 1:** Color fundus photo shows an area of retinal pigment epithelium-choroid atrophy (white arrows) with overlying subretinal fluid (white arrowheads) in the juxtapapillary region

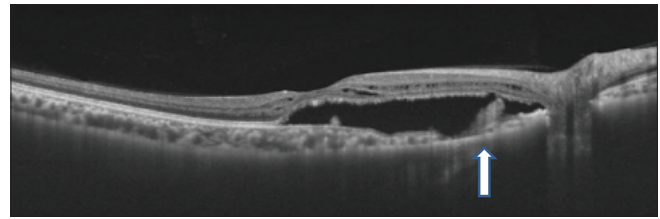


**Figure 3:** Fundus fluorescein angiography shows an area of diffuse hyperfluorescence corresponding to the choroidal excavation (white arrowheads) and progressive focal hyperfluorescence corresponding to the polypoidal lesion (white arrow)

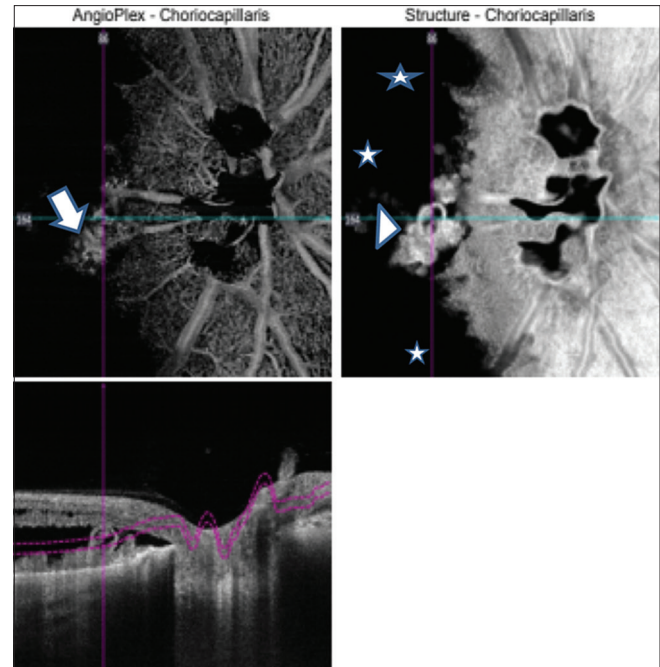
to choroidal excavation [Fig. 3] and progressive focal hyperfluorescence corresponding to polypoidal lesion [Fig. 3]. OCT-A showed lack of choriocapillaris within the area of choroidal excavation [Fig. 4]. A hypoflow structure surrounded by a hyperflow area was also seen in the choriocapillaris at the same level [Fig. 4]. Although indocyanine green angiography is investigation of choice for PCV, requisite information could be gathered from OCT-A in our case.

## Discussion

FCE has an association with PCV.<sup>[2]</sup> Individually, OCT features of FCE and PCV have been well documented.<sup>[4]</sup> OCT-A features of PCV have been described.<sup>[5]</sup> In our case, JCE appears as a hypoflow area. This can be attributed to choriocapillaris



**Figure 2:** Swept-source optical coherence tomography shows retinal pigment epithelium atrophy overlying an area of choroidal excavation with subretinal fluid. CME is noted. A hyperreflective polypoidal lesion is seen within the area of choroidal excavation (white arrow)



**Figure 4:** Optical coherence tomography angiography (OCT-A) shows an area devoid of choriocapillaries in the region corresponding to diffuse choroidal excavation (white stars). A hyperflow network is seen in OCT-A at the level of the polypoidal lesion in swept-source optical coherence tomography (broad arrow). A hypoflow structure surrounded by a hyperflow area is also seen in the choriocapillaris at the same level (white arrowhead)

attenuation in this region. It is possible that a prior episode of subretinal bleeding from polypoidal lesion is responsible for choroidal atrophic changes, but a cause-effect relationship is hard to establish in the absence of a longitudinal study. Larger studies with longer follow-up are required to understand the two entities better.

### 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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