necessary to better quantify capillary densities.[1] However, this is not applicable for most ophthalmologists; thus, pointing out a differential pattern of ODD and ODE using commercial OCTA images could be more helpful for practical reasons. In that sense, our study could be valuable to ophthalmologists to assist their decision without the use of complicated analysis using customized software.

The analysis of OCTA images of swollen optic discs is still an unknown area. We should move forward to yield accurate analysis with improved software, as the authors suggested.

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CONFLICT OF INTEREST DISCLOSURES: SEE THE ORIGINAL article for any disclosures of the authors.

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Comment on: Morphologic Features of Buried Optic Disc Drusen on En Face Optical Coherence Tomography and Optical Coherence Tomography Angiography

KIM AND ASSOCIATES[1] HAVE USED EN FACE OPTICAL coherence tomography (OCT) and OCT angiography (OCTA) to distinguish presumed cases of "optic disc drusen" (ODD) from papilledema. The excellent quality of the images allows us to comment on the findings.

The Optic Disc Drusen Studies Consortium has published consensus recommendations for the OCT diagnosis of ODD.[2] On OCT, exposed and buried ODD are seen as rounded, signal-poor lesions within the prelaminar optic nerve head, occasionally associated with a hyperreflective cap, hyperreflective lines, or multiple aggregates. Neither the images as presented, nor the criteria used to identify ODD in the current study met consortium OCT criteria for the diagnosis of ODD. Instead, the criteria used by Kim and associates relied on the presence of a peripapillary hyper-reflective ovoid mass-like structure (PHOMS).

The authors have previously asserted that PHOMS are uncalcified precursors or variants of ODD.[3,4] However, the histological correlate of PHOMS has yet to be confirmed. It is therefore imperative that authors not assume that PHOMS are ODD, as has been done in this paper. Several of the coauthors have acknowledged the disagreement as to whether PHOMS are ODD noting "that if ODD are defined according to the….[consensus] guidelines then PHOMS should be regarded as a different diagnostic entity".[4] Regardless of the differing viewpoints, this report by Kim et.al. is an en face OCT and OCTA study of PHOMS, not ODD.

For this communication, we will only point to the most compelling argument against equating PHOMS with ODD, which is that PHOMS occur in a variety of optic nerve head disorders.[5] We propose to define three categories of PHOMS: 1.Drusen-associated PHOMS includes cases that meet the consortium criteria for the OCT diagnosis of ODD and PHOMS. 2.Disc edema-associated PHOMS includes patients with any type of disc edema and PHOMS, and 3. Anomalous disc-associated PHOMS that principally occur in mildly tilted optic discs or a myopic obliquely-inserted discs (MOID); a common cause of pseudopapilledema without ODD. MOID typically has an elevated, pale C-shaped halo nasally, retinal pigmentary changes temporally and unlike the fully developed tilted disc syndrome, has little or no rotation or retinal ectasia. Pichi and associates[6] noted the frequent occurrence of a "dome-shaped hyper-reflective structure" nasally on OCT, identical to the PHOMS in ODD.[2] Others have confirmed this observation.[5,7]

The patients presumed to have "buried ODD" in the present study[1] were myopic, with OCT characteristics consistent with "anomalous disc-associated PHOMS".

The authors have raised an important point not to be overshadowed by this disagreement, which is that the underlying cause of PHOMS needs to be better understood. PHOMS is not a diagnosis; it is a non-specific structural OCT finding associated with an elevated optic disc. The composition of PHOMS must ultimately be determined histopathologically. There already exists some histopathology to support the view that PHOMS are herniating nerve fibers in papilledema and ODD.[2,5] The authors of this paper have proposed several plausible alternatives for example, that PHOMS might be caused by granulation tissue or degenerating axons.[4] Until this question is resolved, we suggest using the above descriptive nomenclature.

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Reply to Comment on: Morphologic Features of Buried Optic Disc Drusen on En Face Optical Coherence Tomography and Optical Coherence Tomography Angiography

WE GREATLY APPRECIATE THE INTEREST THAT SIBONY and associates[1] demonstrated in our study. The authors raised an important question regarding the definition of optic disc drusen (ODD) in our study. We know that the Optic Disc Drusen Studies Consortium defined ODD as hyporeflective lesions surrounded by hyperreflective capsules using optical coherence tomography (OCT). We previously showed that this kind of visible drusen can be observed especially in the eyes of the elderly associated with degenerative changes on OCT.[2] However, in young patients, ODD can be seen as a hyperreflective mass on OCT, located nasal to the optic disc. The Consortium denies the latter ODD as true drusen and named them peripapillary ovoid mass-like structures (PHOMS) instead. PHOMS is a vague term denying any cause for or mechanism of the lesion. The most important reason why the Consortium used the term PHOMS instead of ODD is based on the histopathological examination described in their paper in 2018 (see their Figure 4C-E).[3] However, we are still doubtful about the histological images, and the true pathogenesis of PHOMS or buried ODD (by our definition) remains to be defined.[4]

To prove whether PHOMS is merely herniated optic nerve fibers or not, we analyzed the en face OCT images in this study.[1] Cross-sectional OCT, en face OCT, and OCT angiography simulate in vivo histology and could be superior to ex vivo histopathology in certain aspects, as the last could be influenced by postmortem changes