

## Comments on: Monocyte to high-density lipoprotein ratio in central serous chorioretinopathy: A biomarker of inflammation or epiphenomenon

Dear Editor,

We read with interest the article by Sirakaya *et al.* on monocyte to high-density lipoprotein ratio (MHR) in acute central serous chorioretinopathy (CSC).<sup>[1]</sup> MHR has emerged as a biomarker of inflammation and oxidative stress in recent years. Authors excluded patients with ocular or systemic inflammation and construed their interpretation based on the skewed MHR. They did not observe any difference in CRP or ESR values, attributing it to small sample size; nor did another cited study.<sup>[2]</sup>

Since MHR has two constituents, the HDLs and the monocytes, one would expect atheromatous conditions, coronary artery diseases, and dyslipidemia to have a higher odds ratio for CSC. However, while CSC typically affects younger men, these vascular conditions peak up in later decades. Similarly, many granulomatous inflammatory states driven by monocyte-macrophage system, such as interstitial lung disease, sarcoidosis etc., do not predispose to CSC. Authors cite Behçet's disease as one of the ocular conditions that have similar MHR predisposition. However, the multi-systemic and ocular vasculitis and presence of cytokines such as tumor necrosis factor- $\alpha$ , and interleukins are lacking in CSC.

Although presumed primary inflammation can alter choroidal blood flow, a primary vascular dysregulation too can induce retinal pigment epithelial changes. Thus it is difficult to link the observed change in MHR as the cause. Instead, it could be an epiphenomenon akin to detecting anti-retinal antibodies in CSC.<sup>[3]</sup>

Interestingly peripheral vascular/endothelial dysfunctions implicated earlier have wider ramification.<sup>[4]</sup> It is evident in the association of CSC with erectile dysfunction. Furthermore, phosphodiesterase inhibitors such as sildenafil that operate through nitric oxide release are known triggers of CSC, which is consistent with endothelium-dependent flow-mediated vasodilatation.

In summary, the proposed association appears conjectural; consequently, it may be premature and hazardous to combine corticosteroids and mineralocorticoid receptor antagonist as advocated in a related commentary.<sup>[5]</sup>

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### Conflicts of interest

There are no conflicts of interest.

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