

## Commentary: Post fever retinitis and vasculitis: A morphological conundrum

Post fever retinitis and vasculitis is the term used for describing the various retinal manifestations seen after a systemic febrile illness caused by either bacteria, viruses, or protozoa. These manifestations may be the result of a direct invasion by the pathogen or by indirect invasion mediated through immune-modulated mechanisms. Post fever retinitis and vasculitis as an entity usually manifests between 2 and 4 weeks after the fever in immunocompetent patients, irrespective of etiology.<sup>[1,2]</sup> Patients typically present with diminution of vision that is sudden in onset and painless. Patients can have varied posterior segment manifestations, including focal and multifocal patches of retinitis which could be unilateral or bilateral, possible optic nerve involvement, serous detachment at the macula, macular edema and localized involvement of the retinal vessel in the form of beading of the vessel wall, tortuosity, and perivascular sheathing.

Looking back at the evidence from various case series and anecdotal case reports in the literature,<sup>[1-7]</sup> it is evident that the morphological appearance of the disease remains the same, irrespective of the cause of the fever. These manifestations seem to be a result of an immune-mediated mechanism. No treatment seems to be established based on the literature,<sup>[1-7]</sup> and patients may improve as a part of natural history.

One hypothesis that can be arrived based on our experience and reviewing the available literature is that a natural course does exist for post fever retinitis and vasculitis, wherein the manifestations start, leading to a peak of progression and finally terminating with resolution. An analogy can be The Bell Curve of normal distribution if the patient is examined on the ascending limb of the curve, a worsening would be noted despite treatment, whereas if the patient is seen when the manifestations have reached their peak, a resolution would be seen, irrespective of the treatment.

Post fever retinitis and vasculitis presents with a similar morphological pattern, irrespective of the etiology and it follows a preset natural course before resolution. This entity needs to be studied further to understand the natural history with histopathological and immunological aides to further understand the pathophysiology in detail.

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