

Commentary: Evidence of dengue virus in eviscerated specimens of panophthalmitis secondary to dengue fever: A possible cause-effect phenomenon

Sight-threatening manifestations following dengue fever (DF) are being increasingly reported. They may be retinal vasculitis, vascular occlusions, optic neuritis, endophthalmitis, orbital cellulitis, corneal and scleral melt, and panophthalmitis.^[1-5]

Recently, we have reported five patients who developed irreversible visual impairment following platelet transfusion for dengue fever. None of our patients showed any microbiological growth from the conjunctival swab and in two patients who underwent vitreous sampling.^[6]

The authors [XX]^[7] have done commendable work in isolating dengue virus NS1 RNA in their eviscerated samples. However, the mere presence of the virus may not indicate a causative role in the panophthalmitis as the authors have rightly concluded. Further investigations are required to determine whether active viral replication or viral remnants or superadded bacterial infection account for this result. At presentation, a platelet count of 60,000 per microliter of blood was mentioned for the second case. Additional information about the platelet counts during dengue hemorrhagic fever and also during ocular presentation for all the cases can add additional insight into the disease course. The article could also mention whether single-donor platelets or pooled platelets were administered to their first two cases.

Case 1 showed dengue virus NS1 RNA in the right eye but not in the left eye. Blood cultures in cases 2 and 3 were not available; it needs to be explored if blood culture has a role in the patients with dengue panophthalmitis. Kuehnert *et al.*^[8] estimated that the rate of transfusion-transmitted bacteremia (in events/million units) was 9.98 for single-donor platelets, 10.64 for pooled platelets, and 0.21 for red blood cell units. Pallavi *et al.*^[9] reported that liberal use of platelets in the treatment of dengue may create a real danger to the patients in terms of fluid overload and transfusion-transmitted infections.

Complications of vision loss due to panophthalmitis can be reduced by avoiding unnecessary platelet transfusions in dengue hemorrhagic fever management.

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