

## LETTER TO EDITOR (VIEWERS CHOICE)

### BILATERAL EXUDATIVE RETINAL DETACHMENT IN A CASE OF APLASTIC ANEMIA

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**Keywords :** aplastic anaemia, retinal detachment

A 7 years old female child presented to pediatric emergency with fever for 20 days and continuous bleeding from gums following tooth extraction for 8 days. On examination she looked ill, had pallor and was disoriented. She had petechial spots all over the body. Oral hygiene was poor and there was bleeding from gums. Her vision was significantly impaired and she could count fingers only from a distance of 0.5 meters. Complete blood count revealed pancytopenia. Bone marrow aspirate showed hypocellular marrow. Serological analysis for Parvovirus B19 infection was negative. Funduscopy of both eyes showed bilateral exudative retinal detachment which was further confirmed by Ultrasound B-Scan.

Aplastic anaemia is characterized by peripheral pancytopenia coupled with hypoplastic or aplastic bone marrow. It is typically characterized by anemia, leucopenia and thrombocytopenia which clinically manifests as fatigue, cardiac failure, infection and bleeding. (1) Besides gingival or nasal bleeding, patients with aplastic anaemia may present with ocular hemorrhages. (2) Common retinal findings in aplastic anemia include intra-retinal hemorrhages, Roth's spot hemorrhages, cotton-wool spots, retinal exudates, venous dilation, optic nerve pallor and retinal detachment. (3,4) Some blood dyscrasias including aplastic anemia have an association with exudative retinal detachment. The exact pathophysiology of anemic retinopathy is not clearly understood, but it seems to be related to retinal hypoxia. These changes generally occur in patients with severe anemia or when thrombocytopenia (abnormally low platelet count) is present. According to various studies, aplastic anaemia patients with ocular findings appeared to have various degrees of disseminated intravascular coagulopathy syndrome with serious rheological shifts and hemorrhagic diathesis. This is particularly noted in Parvovirus B19 induced aplastic crisis. (5) The associated exudative retinal detachment may undergo

spontaneous resolution if the causative disease is controlled. Thus the treatment is aimed at correcting hematological parameters. Coordination of medical and surgical care with the hematology service is strongly advisable to stabilize hematologic parameters prior to undertaking a vitreo-retinal procedure.

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