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CASE REPORT

A RARE CASE OF EXUDATIVE RETINAL DETACHMENT IN A CASE OF PANCYTOPENIA

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Abstract

A 12 years old male child presented to emergency with fever for 20 days. On examination she looked ill, had pallor and was disoriented. She had petechial spots all over the body. He was diagnosed of Dengue 1 month back with NS1 antigen positive. His vision was significantly impaired and he could count fingers only from a distance of 0.5 meters after 8 units of Packed Red blood Cells (PRC) and 11 units of Random Donor Platelet Concentrates (RDP). Complete blood count revealed pancytopenia. Bone marrow aspirate showed hypocellular marrow. Funduscopy of both eyes showed bilateral exudative retinal detachment which was further confirmed by Ultrasound B Scan with subhyaloid hemorrhage with multiple cotton wool spots and Roth spots hemorrhages with normal optic disc. Patient was put on oral steroids and observed. Exudative retinal detachment subsided along with subhyaloid hemorrhage and vision improved to Snellens 6/60 in left eye and finger counting 4 metres in right eye. Intravitreal Anti VEGF injection is planned to rescue hypoxic retina.

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Introduction:-

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.

Discussion:-

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.

Conclusion:-

Coordination of medical and surgical care with the hematology service is strongly advisable to stabilize hematologic parameters prior to undertaking a vitreo-retinal procedure.

Compliance with Ethical Standards

Funding none

Conflict of Interest None

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