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A TWO-STEP APPROACH TO MANAGING PEDIATRIC TRAUMATIC SUBMACULAR HEMORRHAGE.

INTRODUCTION:

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Submacular hemorrhage (SMH) is a vision-threatening condition with varied causes, lacking a standardised treatment approach. Current therapies include intravitreal injections, pneumatic displacement, and surgery, each with limitations, especially in children. This report presents the adoption of a rare two-step method, combining an initial minimally invasive intravitreal injection of tPA and SF6 with a subsequent, more invasive subretinal injection, to effectively displace SMH.

Case report

This case presentation is of a 12 year old boy who suffered a traumatic chorioretinal rupture with extensive submacular haemorrhage involving the macula. Initial management approaches included intravitreal tPA injection with pneumatic displacement with little improvement in visual acuity. The approach then shifted to minimal core vitrectomy without posterior vitreous detachment and submacular tPA injection and air tamponade. The child made a remarkable recovery with complete resolution of the haemorrhage within a week and improvement in his visual acuity to 6/9 one month after the surgery maintained over 1 year.

This case contributes to the literature on the management of submacular haemorrhages in paediatric cases, offering insights into the different submacular haemorrhage displacements expected with these 2 approaches. Further studies will be needed to evaluate in detail the efficacy and safety of these two procedures in the pediatric population.

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