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Case report

A case of complex macula-off retinal detachment following traumatic globe rupture

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1. Case report

A 9-year-old boy was referred to our service for the first time for an emergency consultation with worsening vision in his right eye for 2 days. He had a pencil injury to the right eye seven months prior with a ruptured globe repair and subsequent posterior chamber intraocular lens (PCIOL) surgery for a traumatic cataract six months after the injury; this repair was performed by another provider. Visual acuity of the right eye at initial presentation was count fingers.

2. Discussion

Clinical examination showed what appeared to be a giant retinal tear, but during surgical repair we found a huge giant tear with 180-degree macula-off retinal detachment and temporal retinal dialysis from 6 to 12 o'clock. There was no PVD. A B-scan was not performed because the view was clear enough to see the retinal detachment. Surgical repair involved 23-gauge pars plana vitrectomy with perfluorocarbon placement, triamcinolone (Kenalog) injection, membrane peeling, endolaser, air fluid exchange, inferior iridotomy, and silicone oil placement. We considered scleral buckle but felt the vitrectomy would be effective in repairing the retinal detachment. We felt the vitrectomy could effectively relieve the tractional forces without the need for a buckle. Two days following surgical repair, visual acuity improved to 20/300 and two weeks post surgery was 20/150 without correction. (see Fig. 1).

3. Conclusion

Although a majority of retinal tears and retinal dialysis typically occur within 1 month following globe rupture, this case demonstrates that retinal dialysis is possible for an extended time following injury, especially in pediatric patients.[1,2] Close monitoring is essential for early detection, and timely surgical repair of retinal injury may help to preserve vision especially if performed before involvement of the macula.

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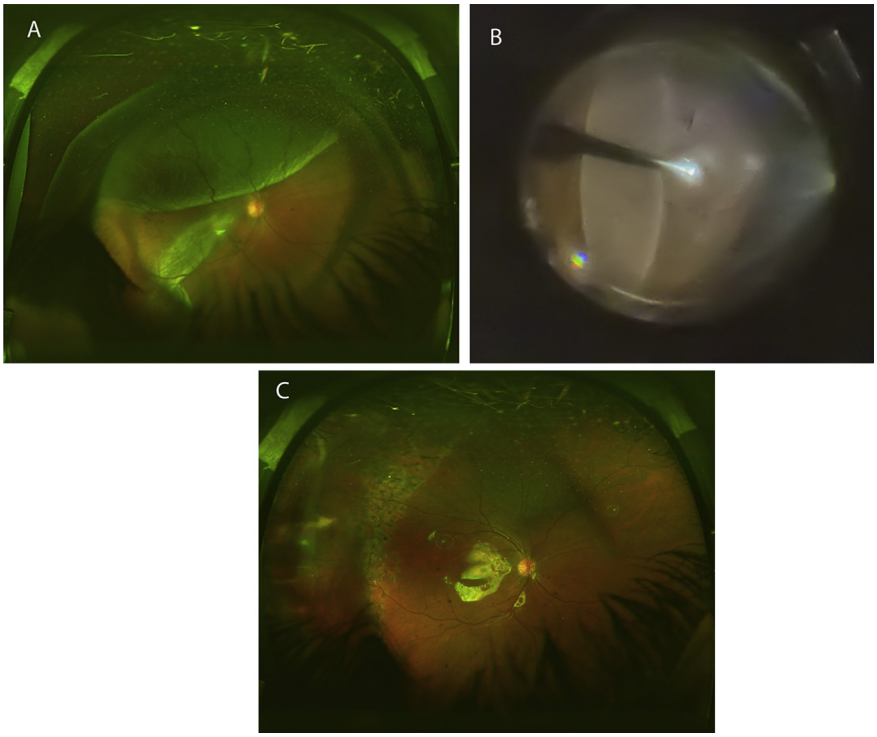

Fig. 1. A, Image taken during clinical examination showing what appeared to be a giant retinal tear; B, Complex macula-off retinal detachment with 180° of temporal retinal dialysis from 6 to 12 o'clock found intra-operatively; C, Two days postoperative attachment of the retina under silicone oil and laser.

Authorship

All authors attest that they meet the current ICMJE criteria for Authorship.

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