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Short Communication

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Pediatric Ocular Trauma-A Monster

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Ocular trauma is an important topic with respect to preventable monocular blindness of the globe. Pediatric ocular trauma is a matter of great concern as sight loss in the younger age group puts extra economic and social burden. Unresolved controversies and debatable management strategies need to be addressed with the development of novel research technology [1].

During current time of COVID lockdown schools are off rural children are more prone for injuries during outdoor play [2].

Prospective, controlled, clinical studies cannot be conducted in ocular injury setting.

Children account for approximately one-third of the cases of severe eye injuries [2,3]. However, the classification and scoring system in pediatric trauma is based on that developed for adults. The controversy over the position of zones 2 and 3 is pronounced in pediatric trauma.

Although management of trauma in children has many similarities to adults, striking differences are also noted. The adults achieve visual maturation, whereas amblyopia is a major contributor to poor outcomes in children, especially in those < 5-years-old.

When treating children with OGI, achieving a clear visual axis following globe repair must be accompanied by accurate refraction and aggressive amblyopia therapy to improve the visual outcomes [4]. Another difference is that a simple examination, especially in the early stages after trauma, can be difficult in a child requiring general anesthesia or sedation for proper assessment. Thus, the involvement of a pediatric ophthalmologist and access to pediatric facilities are essential for the management of OGI.

A major challenge in the care of eye trauma in children is the precise visual prognosis.

The pediatric penetrating ocular trauma score (PPOTS) downplayed initial VA and added age and wound location as two new variables and excluded the afferent pupillary defect as a prognostic factor [5].

Recently, the toddler/infant ocular trauma score (TOTS) was developed specifically for children < 6-years-old with traumatic OGIs.

For traumatic cataract we need to understand a few parameters, such as the age of the patient, expertise of the surgeon and assisting staff, availability of infrastructure facility, the status of the cataractous lens, and lens vitreous admixture that will guide the surgeon in planning the surgery, before effectuating primary or delayed cataract extraction and intraocular lens implantation. The increasing duration between injury and presentation of morphology might be altered because of absorption of lens matter and synechiae formation, which require different techniques and vitreoretinal interventions [6].

A few studies compared visual outcome among open and closed globe injuries visual outcome, and was better in closed globe injuries [5]. Whether single or multiple step surgeries are preferred is yet controversial in multistep management [7].

One of the manifestations of ocular trauma is posttraumatic strabismus. The most common cause of alteration in motility is caused by the orbital fracture [8,9].

POT is a complicated topic. Although several studies have helped resolve the underlying mysteries.

However, many multicenter studies are required to upgrade the knowledge and reduce unnecessary burden on society. An integrated trauma unit to coordinate various departments might be vital for the appropriate management of ophthalmic trauma in children [10,11].

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