



Editorial

Dr. Zakia Sultana

"I believe in innovation and that the way you get innovation is you fund research and you learn the basic facts." _Bill Gates

Research brings revolution to modern civilization. Researcher and research activities are imperative to outreach scientific horizon. Lets encourage new researchers for their tremendous endeavors.

Pterygium is a wing-shaped fibrovascular disorder of the conjunctiva where connective tissue extends towards cornea. Hot climate and ultra-violet rays are major responsible factors. It occupies visual axis and brings out astigmatism. Excision of pterygium with conjunctival auto graft is highly practiced surgical procedure for these cases. Per operative hemorrhage is one of the major complications which obscures surgical field and delays surgical period. Brimonidine helps to control bleeding by its selective α 2-adrenergic agonist activity. Use of brimonidine may play a vital role for successful pterygium surgery and maintaining vision¹.

Keratoconus is a bilateral, non-inflammatory and progressive disorder. It consists of thinning and forward protrusion of cornea, progressive myopia and irregular astigmatism. In Keratoconus, the structural integrity of the collagen matrix was compromised. Patients commonly complain about dimness of vision, increased light sensitivity, severe headache, and difficulty reading, writing, and driving. Corneal Topography is one of the most reliable tools for diagnosis. Previously, spectacles, contact lenses, and corneal transplantation were the choices of treatment.² In 2003, Wollensak et al. published a seminal article on corneal collagen cross-linking (CXL) with evidence of using CXL to prevent the progression of Keratoconus. Collagen cross- linking improves visual and topographic findings– K1, K2, and

Kapex and reduces astigmatism. Early diagnosis of Keratoconus and prompt treatment will help achieve better vision².

Retinopathy of prematurity (ROP) is a retinal vascular disorder that mainly affects underdeveloped retina in premature infants. Retinopathy of prematurity (ROP) may appear between the 3rd to 4th chronological age (CA) weeks, namely from 31 to 33 weeks post-conception, irrespective of the gestational age (GA) at delivery. Prematurity is defined by the World Health Organization (WHO) as an infant born at less than 37 weeks' gestation and severe if less than 28 weeks. Low birth weight (LBW) is defined as than 2,500 grams and extremely LBW as <1000g. Preterm and low birth weight babies who have got oxygen therapy in neonatal intensive care unit were the major cases of ROP in a tertiary eye care hospital. Untreated progression of ROP may cause significant vision impairment and childhood blindness. Scheduled screening, early diagnosis and prompt treatment is imperative for maintaining vision³.

World Health Organization (WHO) stated that approximately 51% blind patients are suffering from cataract. 90% of these cataract induced blindness are from developing countries. Cataract extraction is the most common ocular surgery all over the world. Previously injectable anesthetics and topical mydriatics are commonly used for cataract surgeries. Small incision cataract surgery is commonly practiced in developing countries to ensure cataract extraction even in rural level. Cases with other co existing diseases sometimes discourage proper pupil dilatation which in turn may lead to limited surgical field exposure and may affect surgical outcome. Combination of

intra-cameral (IC) administration of mydriatics and anesthetics (tropicamide 0.02%, phenylephrine 0.31% and lidocaine 1%) can offer proper pupil dilation which leads to adequate surgical comfort⁴.

Ocular trauma is one of the prominent causes of diminished vision and blindness. According to the World Health Organization (WHO) annual incidence of ocular trauma is approximately 55 million. Among ophthalmic hospital cases, 16% are from ocular injuries. Initial visual acuity, patients' other co morbidities, delayed presentation, place and size of injury, causative agent of trauma, ruptured globe, traumatic cataract, retinal detachment, vitreous hemorrhage, phthisis bulbi, endophthalmitis etc may affect final visual acuity after ocular trauma⁵. This study was conducted in National Institute of Ophthalmology & Hospital (NIO&H), which provides maximum ocular trauma management services in Bangladesh.

Congenital nasolacrimal duct obstruction is caused by failure of nasolacrimal duct to open into the inferior meatus of the nose. In 20% infants membranous obstruction at the level of valve of Hasner leads to nasolacrimal duct obstruction. Broad spectrum infant friendly topical antibiotic drops and hydrostatic massage ensures cure in about 95% cases within infancy⁶. This issue is enriched with renovated research papers consists of updated scenario of retinopathy of prematurity, corneal collagen cross linking, intracameral anesthetics, pterygium surgery, nasolacrimal blockage and ocular trauma. We editorial board have done our level best to provide an effective journal for all ophthalmologists, doctors and researchers.

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