Abstracts

17 - Clinical profile and outcome of early surgery in neonatal-onset glaucoma presenting over a five-year period

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Background: Neonatal-onset glaucoma (NOG) is a severe form of childhood glaucoma and is not always due to primary congenital glaucoma (PCG). Due to advances in neonatal care, the incidence of NOG is rising, but it remains an under-reported entity. The objective of the paper was to study the clinical profiles, surgical and visual outcomes of NOG at least one year following early surgery.
Methods: Prospective interventional cohort study at a tertiary care referral centre. Babies with NOG, who presented between January 2013 and December 2017, had a history suggestive of disease onset within one month of birth, and underwent surgery by three months of age, were prospectively enrolled. Those who completed a one-year follow-up after surgery were analysed.
Results: 94 eyes of 53 babies were analysed. 35 (66%) had PCG. Neonatal congenital ectropion uveae, congenital rubella syndrome, Peters anomaly, and Sturge-Weber syndrome comprised the non-PCG group. The mean age at presentation and surgery was 24.8±21.9, and 36.7±29.9 days. Additional glaucoma surgery was required in 43 of the 94 eyes (45.7%). PCG had significantly better outcomes than other glaucomas at all time points. 28.3% of eyes had good vision (LogMAR 0-0.5), 34.7% had moderate visual impairment (LogMAR 0.7-1.0), and 16% were blind (LogMAR <1.62).
Conclusion: Our study shows that NOG does not always have a dismal prognosis. A small but significant proportion could have underlying conditions other than PCG. Timely surgery and rigorous amblyopia therapy resulted in good outcomes in terms of IOP control and vision in this cohort.