UK Paediatric Glaucoma Society (UKPGS) Annual Meeting Saturday 23rd January 2021,10:30 – 16:35 GMT

Approved CPD 6 points (Royal College of Ophthalmologists)

Abstracts

5 - Long-term outcomes of Ahmed glaucoma valve implantation in eyes with paediatric keratoplasty

Dr Sirisha Senthil
Rai M, Mohamed A, Ramappa M
L V Prasad Eye Institute, Hyderabad, India
Correspondence: sirishasenthil@lvpei.org

Background: The aim of this study was to assess the long-term efficacy and safety of the Ahmed glaucoma valve (AGV) in eyes with glaucoma that underwent keratoplasty in a paediatric age group.

Methods: This was a non-comparative retrospective interventional study where children who underwent AGV implantation with documented 1-year follow-up were included. The main outcome measures were intraocular pressure (IOP), anti-glaucoma medication (AGM), visual acuity (VA) and AGV survival.

Results: Twenty-eight eyes of 25 children were included. Mean follow-up after AGV was 3.4±0.5 years. Mean IOP (in mmHg) was 31.5±2.0 pre-operatively and significantly decreased at 3- and 6-months follow-up. Mean number of AGM reduced significantly (p<0.001) following tube and mean visual acuity did not show improvement. Kaplan-Meier survival analysis showed cumulative probability of AGV success as 92.9%±4.9% at 1 year that maintained until 4 years, 81.3%±11.7% at 5 years and 67.7%±15.7% at 6 years. The AGV success was comparable between PK and DSEK eyes (p=0.73). The cumulative probability of graft survival was 96.2%±3.8% at 1 year, 84.3%±7.2% at 2 and 3 years, and 77.8%±9.1% at 4 years that maintained until 8 years. The graft survival was also comparable between PK and DSEK eyes (p=0.18).

Conclusions: AGV can be considered to be a safe and an effective surgical option in eyes with glaucoma in paediatric eyes post-keratoplasty. Both the graft and the tube had good success rates during five years of follow-up.