

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

Approved CPD 6 points (Royal College of Ophthalmologists)

## Abstracts

### **10 - Surgical outcomes of the Aurolab aqueous drainage implant (AADI) versus the Ahmed glaucoma valve (AGV) for refractory paediatric glaucoma**

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**Introduction:** Whilst the Ahmed glaucoma valve is a popular choice in the Middle-East for refractory paediatric glaucoma, the Aurolab aqueous drainage implant (AADI) is a non-valved glaucoma drainage device (GDD) that has the advantages of cost-effectiveness and possibly better glaucoma control.

**Purpose:** To compare the outcomes of the AADI with the AGV in terms of relative efficacy and safety, in a Middle-Eastern paediatric population with refractory glaucoma.

**Methods:** A comparative retrospective study of consecutive paediatric patients (age  $\leq 18$  years) who received the AADI vs AGV from 2014-2019. Data collected included demographics, type of glaucoma, intraocular pressure (IOP), number of anti-glaucoma medications (AGM) and any subsequent complications or further surgeries.

**Results:** A total of 126 tube surgeries (56 eyes in AADI and 70 eyes in AGV) were performed. The mean duration of follow-up was  $25.33 \pm 11.03$  and  $13.77 \pm 10.07$  months in the AGV and AADI groups, respectively. There were no significant differences in post-operative IOP readings or success rates between the two groups. However, AADI had a consistently significant lower mean number of AGMs after six months till last visit (0.8 compared to 1.6 in AGV). Significant complications were transient choroidal detachment in 12.5% of AADI and late encapsulation in 8.6% of AGV group. (Significance p-value  $< 0.05$ ).

**Conclusion:** This is one of the few studies conducted outside India (country of origin of AADI) that has studied AADI in a paediatric population. The findings suggest an acceptable safety profile for the AADI in children, with less need for glaucoma re-operation or glaucoma medication in the longer term.