

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

13 - Baerveldt tube insertion in *LTBP2* mutation related glaucoma: A case series

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Purpose: To report the ocular findings and management of patients with *LTBP2* mutation in a tertiary paediatric hospital in Greece.

Material and methods: 17 patients (9 males and 8 females) with *LTBP2* mutation (*R299**) presented to the ophthalmology department between 2008 and 2020. Data were collected retrospectively from the medical records.

Findings/Results: All patients were of Roma ethnicity. Mean presentation age: 40 months (1 day to 10.5 years). Mean follow-up time 34 months (3-80 months range).

The main reasons for presentation were dislocated lens in the anterior chamber, family history of paediatric glaucoma (siblings) and glaucoma surgery elsewhere.

All patients had megalocornea (mean corneal diameter 14.3 mm), microspherophakia and increased corneal thickness (average 706 µm). All patients developed glaucoma. 12 patients underwent glaucoma surgery (goniotomy, peripheral iridectomy, trabeculectomy, cyclodiode, tube insertion). Baerveldt tube was inserted in 10 eyes of 8 children. The IOP prior to Baerveldt insertion was 30-50 mmHg under maximum treatment and the post-operative IOP was between 10 and 32 mmHg. Patients were followed up postoperatively on average for 23 months. Despite the high intraocular pressures, the disc cupping did not evolve rapidly (mean C/D ratio 0.37). This could be partially explained by the increased corneal thickness.

Conclusions: *LTBP2* mutation causes a devastating glaucoma in childhood; hard to manage.

Baerveldt tube provides reasonable control of the intraocular pressure. This is the first case series to our knowledge, describing the experience of using Baerveldt tube in patients with *LTBP2* mutation.