

European Society of Ophthalmology



European Leadership Development Programme, Class of 2025-2027

Project Abstract

Title: Management of Congenital Glaucoma at Saint George University Hospital

Purpose: To evaluate and optimize the therapeutic approach and monitor the functional outcomes of patients diagnosed with congenital glaucoma at Saint George University Hospital, Plovdiv, Bulgaria.

Methods: This is an ongoing prospective study. To date, 34 eyes from 27 children (18 males and 9 females) have been included. All patients underwent comprehensive ophthalmological assessments, including tonometry, biomicroscopy, indirect ophthalmoscopy, and corneal measurements. Statistical analysis was conducted using SPSS version 19.

Results: The mean age at diagnosis was 6.58 ± 0.68 months. The average preoperative intraocular pressure (IOP) was 28.45 ± 2.10 mmHg. The mean corneal diameter was 13.89 ± 0.20 mm, and the average cup-to-disc (c/d) ratio was 0.49 ± 0.05 . On average, each patient was hospitalized 7.88 ± 0.52 times and underwent 1.52 ± 0.15 surgical procedures. The mean follow-up period up to now was 19.44 ± 1.83 months. At the most recent visit, IOP was successfully controlled in 24 patients (70.6%), while 10 patients (29.4%) had uncontrolled IOP. Topical treatment was still required in 10 patients (29.4%), whereas 23 children (67.6%) were free of eyedrops.

Conclusion: The results emphasize the necessity of prompt diagnosis, methodical follow-up, and customized surgical treatment in managing congenital glaucoma. Advancing and adapting therapeutic strategies will be crucial for improving long-term visual prognosis and patient quality of life.