

**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

### **29 - Congenital nasolacrimal duct obstruction and childhood glaucoma: Rare concurrence and distinct presentations**

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**Introduction:** Both primary congenital glaucoma (PCG) and congenital nasolacrimal duct obstruction (CNLDO) present with tearing, challenging primary care providers to discriminate accurately between these two diagnoses. The tearing characteristics of PCG and the prevalence of CNLDO in a large cohort of childhood glaucoma patients are reviewed. Pubmed literature review revealed no similar data.

**Methods:** Retrospective review of 18,084 paediatric patients at a major US academic practice over 10 years with 11 providers.

**Results:** 208 (1.15%) patients had a childhood glaucoma diagnosis. 7 of these had a diagnosis of CNLDO or congenital nasolacrimal stenosis (CNLDS). 4 were false artifacts of inaccurate coding. In all 3 remaining cases, mattering began after glaucoma had already been diagnosed, prompting the subsequent diagnosis of CNLDO. The rate of CNLDO in our population of patients with childhood glaucomas was 3/208 (1.4%). In contrast, 28/208 (13.5%) patients were diagnosed with PCG during infancy and presented with: 0 (0%) mattering, 20 (71%) clear tearing, 23 (82%) photophobia, 27 (96%) corneal haze.

**Discussion:** The rate of CNLDO in 208 patients with a childhood glaucoma diagnosis (1.4%) was significantly less than typically cited incidences of 6-20% in the United States population ( $p=0.0087$ ). 0 cases of PCG presented with mattering while 71% presented with clear tearing. In no cases did mattering mask an underlying diagnosis of childhood glaucoma. Primary care providers should be counselled to consider referrals urgently to ophthalmology for tearing when that tearing is clear, especially if associated with photophobia or corneal haze.