Paediatric Ophthalmology

Chairperson: R Sharma

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Update on Managing Amblyopia
C Mckeown

Update on Managing the Child with Strabismus
S Johnston

Pitfalls in Paediatric Ophthalmology
C Mckeown

Managing Refractive Errors in Children
L Vaughn

Bilateral Microphthalmia: Case Report

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Background: Microphthalmia is a developmental disorder of the eye in which one or both eyes are abnormally small with anatomic malformations. Microphthalmia in newborns can be associated with fetal alcohol syndrome, infections during pregnancy and genetic causes. Microphthalmia may be accompanied by other pathologies of the optic tract such as colobomas. In some patients, the eyeball may appear to be completely absent but remaining eye tissue is present. Such severe microphthalmia is distinguished from another condition called anophthalmia, in which there is no eye formation.
Case Presentation: This case report describes an eleven day old female neonate reviewed at the Neonatal Unit at Georgetown Public Hospital presenting clinically with what appeared to be bilateral anophthalmia. Both palpebral fissures were fused with no detectable globes *via* ultrasound. Upon the follow-up of this patient at the Paediatric Ophthalmology Clinic, a magnetic resonance imaging done of the orbits and brain showed bilateral severe microphthalmia with optic nerve and chiasma atrophy. Family history revealed ocular malformations in patient's mother and maternal great grandfather.
Conclusion: Severe bilateral microphthalmia is a rare ocular developmental disorder. There was a strong genetic relationship in this case. Future intervention for this patient involves oculoplastic surgery for placement of prosthesis to ensure growth of orbits, facial integrity and overall aesthetics.

Analysis of Paediatrics Patients with Anisometropia and its Relation with Amblyopia and Strabismus

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Background: Anisometropia is the condition in which there is a difference in the refractive error between both eyes. It is the main cause of amblyopia. Inhibition in the fovea of the amblyopic eye to eliminate the sensory interference caused by the overlapping of the unfocussed image generates that there is no fusion phenomenon and the appearance of strabismus.
Objective: To analyse the association of anisometropia with amblyopia and strabismus at a Pediatric Ophthalmology Clinic.
Method: Descriptive, observational, retrospective and longitudinal study in children between five and 18 years old, with anisometropia at the Pediatric Ophthalmology Clinic in the Ophthalmology Department, Georgetown Public Hospital Corporation from February to December 2016.
Result: The 39 patients with anisometropia were evaluated, average age: 11 years old, there were no differences in relation to gender. The most common refractive error observed was compound myopic astigmatism with 61% follow by mixed myopic astigmatism with 25%, 50% of patients were in orthotropia and the type of deviation that predominated was horizontal: 27% in exophoria, 16% exotropia and only 7% esotropia. Mild amblyopia was present in 40% followed by moderate in 28%, 22% with severe and only 10% without amblyopia.

Conclusion: Anisometropia is a determining factor in the appearance of amblyopia and ocular deviation.