During the period of observation between October 2017 to October 2018 a total of 57 cases were reported giving an incidence of EIE of 1 in 12,828 live births with a corrected incidence of 1 in 9027 live births allowing for estimated under reporting. The mean age of diagnosis and intervention were 7.05± 2.6 months (range 2 to 12 months) and 14.7± 4.9 (range 6.5-28.1 months) respectively. The majority were Caucasians 86.5% and 52.7% were female. Management was surgical in 59.6%, and botulinum toxin alone in 22.8%, 17.5% were observed. There was no significant difference in the age of presentation (P=0.6), gender (P=0.8), prematurity (P=0.5), deprivation indices (P=0.68), refraction (P=0.7), OEIA (P=0.6), DVD (P=0.7) or follow up (P=0.3) between the three groups. The preoperative angle of esotropia was smaller in the observation group (P=0.04). The post-operative angle of esotropia was not statistically significant between botulinum toxin or surgery (P=0.3) though the age of intervention was earlier in the botulinum group (P=0.007). Early intervention did not influence the motor post intervention outcomes between 0-10 prism dioptres of esotropia (P=0.78). Amblyopia (P=0.02) and latent nystagmus (P=0.009) was more common in the observation group.

The incidence of EIE in the UK is considerably lower than reported in other population-based studies. The preferred method of treatment was surgical with earlier intervention in those treated with botulinum toxin. An early age of intervention did not influence motor outcomes. Parental choice and amblyopia treatment were reasons cited for conservative management in the observational group.

16.00 Session VI (P) (S)

Rapid Fire presentations

Moderators: Fiona Rowe, Liverpool and Naomi Tan, London

13 SQUINT HOOK DOWN: A TALE OF HOMEOPATHIC STRABISMUS SURGERY

E Cabourne. *Kingston Hospital NHS Foundation Trust, UK*

10.1136/bmjophth-2023-BIPOSA.13

A 6 year old boy was expected to undergo strabismus surgery for a symptomatic decompensating fully accommodative esotropia. He reported increasingly troublesome double vision.

With low hypermetropic correction, his visual acuity was 0.02 right eye and 0.04 left eye, his stereoacuity 85 seconds of arc, he had an 18 PD near esophoria and 8PD distance esophoria. Uncorrected, his visual acuity was 0.12 in both eyes with a 30 PD right esotropia at near and 20 PD at distance.

Whilst considering squint surgery, his mother, who is studying homeopathy, initiated treatment with an individualised homeopathic remedy of 30c nitric acid administered once a day on a sugar-coated dissolvable tablet. He completed an initial one-week course with success, although the effect was short lived with diplopia returning after one week. He proceeded with an additional two-week course which allegedly improved his symptoms and ocular alignment.

One month following this self-medicated treatment, our patient attended his scheduled outpatient review, to our surprise without diplopia and without spectacle correction. His unaided visual acuity was 0.04 in both eyes and he controlled a 20 PD esophoria for both near and distance fixation. Strabismus surgery was therefore postponed and active monitoring has resumed. At two months, Mum reports he remains asymptomatic.

This is the first case described where individualised homeopathic treatment has demonstrated an apparent resolution of a fully accommodative esotropia. The longevity is yet to be determined but as homeopathy becomes ever more popular, Paediatric Ophthalmologists may require some basic awareness of such fascinating cases.

14 SURGICAL TREATMENT OF HEAVY EYE SYNDROME BY MODIFIED LOOP MYOPEXY

A Agrawal, VSY Geh. *Southend University Hospital, Mid and South Essex Foundation NHS Trust, UK*

10.1136/bmjophth-2023-BIPOSA.14

Heavy eye syndrome or convergent strabismus fixus is an acquired strabismus typically seen in eyes with high myopia. We present a case, discuss the aetiology and management, and include a short video illustrating the surgical procedure undertaken.

A 47-year-old highly myopic woman with h/o bilateral cataract surgery and B/L scleral buckling for retinal detachments, had left esotropia and hypotropia measuring more than 40 prism dioptres base-out and 12 prism dioptres base up. MRI orbits showed bilateral asymmetrical medial deviation of ocular bulbs, more on left side. Also, there was degeneration of lateral rectus-superior rectus band with displacement of lateral rectus downwards.

She underwent Botox to bi-medial recti after which she could demonstrate potential for binocular single vision. A left un-augmented loop Myopexy procedure and recession of the left medial rectus was thereafter performed under general anaesthesia. After surgery, her eyes were binocularly aligned for near with minimal esotropia for distance.

This case suggests that patients with significant esotropia combined with high myopia should be suspected to have heavy eye syndrome. Orbital imaging should be undertaken to demonstrate the anatomical abnormality and muscle paths to confirm a definite diagnosis. Modified Loop Myopexy was found to be effective in this case of heavy eye syndrome

15 RETINOPATHY IN PATIENTS WITH MUCOPOLYSACCHARIDOSIS

M Noor, O McGrath, N Parry, T Aslam, J Ashworth. *Manchester Royal Eye Hospital, Manchester, UK*

10.1136/bmjophth-2023-BIPOSA.15

The mucopolysaccharidoses are a group of inherited metabolic disorders resulting in abnormal degradation of glycosaminoglycans within lysosomes. Ophthalmic manifestations resulting in visual loss include corneal clouding, optic neuropathy and raised intraocular pressure, and retinopathy which occurs in

MPS type I, II, III, IV. While corneal clouding may be stabilised with early treatment with HSCT or surgically treated with a corneal transplant, there is currently no known effective treatment for retinopathy.

We conducted a prospective observational study of patients with MPS who underwent fundus examination, OPTOS imaging, OCT, and electroretinography.

76 patients with MPS were studied, comprised of 45 MPSI, 9 MPSII, 13 MPSIV and 9 MPSVI patients. The age range was 3- 58 years of age. OPTOS imaging was performed in 65 individuals, OCT in 61, and electrodiagnostic assessments in 37 patients. Ten patients (7 MPSI, 3 MPS II) had fundoscopic signs of retinopathy, of which 5 had abnormal ERGs. Twenty one patients (17 MPSI, 2 MPSII, 2 MPSVI) had abnormalities on ERG, of which 5 had concurrent fundoscopic evidence of retinopathy. The onset of retinopathy in MPS patients was observed over a broad age range, with initial detection occurring between 2 and 53 years of age.

Retinopathy can be diagnosed on examination, imaging, or ERG in MPS patients as young as 2 years of age. The development of novel medicines, such as gene therapy, have potential to stabilise or improve retinopathy in the future. Therefore, phenotypic and natural history information pertaining to retinopathy in MPS is extremely valuable.

16 HORNER SYNDROME: CAN IT BE FAMILIAL? CASE SERIES IN A FAMILY AND REVIEW OF LITERATURE

S Goyal, S Verma, R Ranjan, R Goyal. *Royal Glamorgan Hospital, UK*

10.1136/bmjophth-2023-BIPOSA.16

Ophthalmic literature reveals vague and rare references to Horner syndrome on a hereditary basis. We present a case series of mother and son with Horner syndrome, which was confirmed pharmacologically. They noticed symptoms on the same side at a similar age and no serious pathology was found.

Retrospective case review of notes:

Case 1: An 11-year-old male presented with 6 week history of anisocoria, mild right ptosis, no heterochromia and no history of trauma or previous surgeries. The anisocoria was more noticeable in the dark, Horner syndrome was confirmed with apraclonidine test.

Case 2: Mother of case 1, 50-year-old female diagnosed with right Horner syndrome at the age of 14 in Austria. The presenting features were anisocoria, a lack of sweating on the right side of her face. Diagnosis was reconfirmed pharmacologically.

Case 1 was referred to paediatrics for a systemic examination which was normal. He was investigated with urinary catecholamines, MRI head and CT neck and thorax which were all normal. Case 2 was investigated in the past with a normal CT head.

Horner syndrome results in the interruption of the oculosympathetic pathway and can indicate serious pathology in the head, chest or neck. Our cases demonstrate that familial presentation could indicate an idiopathic aetiology as it is unlikely to have pathological Horner syndrome in two first degree relatives.

Our case series highlights the importance of eliciting a family history of Horner syndrome and examining the family members. Positive family history can reassure patients while awaiting results of investigations.

17 DEVELOPMENT OF A QUESTIONNAIRE TO STUDY FEAR AND ANXIETY FACTORS AFFECTING PATIENTS AND THEIR FAMILIES UNDERGOING STRABISMUS SURGERY

G Hogg, S Joshi, H Mason, C O'Byrne, S Jain. *Royal Free Hospital NHS Foundation Trust, London, UK*

10.1136/bmjophth-2023-BIPOSA.17

Patients and their Families undergoing Strabismus Surgery. The aim of this study was to develop a questionnaire to identify perioperative fear and anxiety factors affecting pediatric strabismus surgery patients.

First, we reviewed the literature to determine precipitants of fears and anxieties experienced by pediatric patients. Subsequently, we developed a questionnaire for pediatric patients undergoing strabismus surgery. This was a two part questionnaire, consisting of a 16-piece section for patients and a 22-piece section for parents. Finally, we piloted this questionnaire to validate its clinical use.

Common anxiety factors for children include pain, minor clinical procedures requiring needles, separation from parents and engaging with medical professionals. We used this information to develop a two part questionnaire for patients and parents. The questionnaire elicited positive and negative aspects of the patient journey, corroborated fears reported in the literature, and identified anxiety inducing factors specific to strabismus patients.

There is a lack of evidence regarding fear and anxiety specific to pediatric ophthalmology surgeries. Strabismus surgery carries unique fear inducing factors. Interventions which may alleviate the stress of pediatric surgery, therefore greatly benefit patient experience and surgical outcomes, and should be considered in the care of pediatric patients. Patient educational material is known to provide a sense of control to patients, helping to alleviate such fear.

Evidenced by the literature and the pilot questionnaire, there still exists anxiety inducing factors in pediatric surgery. Investigation into patient fears regarding pediatric strabismus surgery is needed to better understand how clinical staff can support patients perioperatively.

18 ENGAGING WITH YOUNG PEOPLE TO IMPROVE RESEARCH, SERVICES AND WORKFORCE DEVELOPMENT: EYE-YPAG AND 'VISUALLY' WORKSHOPS

V Tailor, LM Brady, J Miller, L Bays, J Zane, G Nagel, H Baker, R Crosby-Nwaobi, A Dahlmann-Noor. *Moorfields Eye Hospital NHS foundation Trust, London, UK*

10.1136/bmjophth-2023-BIPOSA.18

Involving children and young people (CYP) in service and research design improves quality and accessibility. Running events in schools to invite CYP to volunteer and explore careers in the NHS may contribute to uptake of training posts and developing the NHS workforce.