The management and outcome of Paediatric patients with acute onset esotropia at a tertiary referral centre of a 2 year period

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BACKGROUND:

- Acute onset esotropia is a relatively rare presentation of esotropia that characteristically presents in childhood with sudden diplopia and comitant esotropia.
- Other underlying neurological conditions such as intracranial tumours, Chiari malformations and hydrocephalus can have a similar presentation with no clear neurological signs therefore it can pose a diagnostic challenge.
- There are no clear guidelines on management or indication of imaging based on any clinical features.
- We aim to assess the management of patients that present with acute onset esotropia at our tertiary centre over 2 years.

METHODS:

- All patients who presented with acute onset esotropia were identified through diagnoses on Open Eyes Software over a two year period from January 2019 to January 2021.
- Patients with other causes of esotopia such as correctable hypermetropia were excluded.
- Data including presenting symptoms, measurements and outcomes of each patient was collected
- A successful outcome was defined as a residual deviation of less than 11 prism diopters (PD) of esotropia, while partial outcome was defined as less than 21 PD.
- The outcome was categorised as sustained if still present at 6 months or more at follow up.

RESULTS:

29 patients were included in the audit. The average age at presentation was 6.8 years (range 2 – 14 years) and the average time to diagnosis was 10 weeks (range 2 – 24). 27.6% (n=8) presented with symptoms of diplopia. No patients had a history of trauma, nystagmus, anisocoria, papilloedema, neurological or general symptoms or abnormal visual fields. 1 patient had global developmental delay but all others had good general health and development.

EXAMINATION

All patients had full range of normal ocular movements and examination with one patient having an incidental retinal hole diagnosed.



INVESTIGATIONS

- **52% (n=15) had further assessments by Paediatricians**
- **38% (n=11) had neuroimaging as a further investigation.**



INTERVENTIONS

- 69% (n=20) – 1st intervention botox injection to Medial Rectii.
- 50% of these progressed to surgery - either bimedial rectus recessions or a medial rectus recess lateral rectus resect procedure.

INTERVENTIONS

- 17% (n=5) – 1st had surgery
- 10% (n=3) – 1st had patching
- 1 patient progressed to surgery from patching
- 1 patient declined all intervention



OUTCOMES

SUSTAINED SUCCESS – 62 (n=15)

PARTIAL SUCCESS – 17% (n=5)

2 patients – declined surgery

3 patients – residual Eso >21 PD

1 patient – transferred to GOSH so lost to f/u

CONCLUSIONS: We have shown majority of our patients have sustained successful outcomes after botox or surgery.

No Disclosures