

Tertiary centre experience in management of pre-pubertal children presenting with asymptomatic papilloedema in East of England

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Introduction

- Pre-pubertal children with Idiopathic Intracranial Hypertension (IIH) present atypically - asymptomatic, have normal BMI.
- We aim to look into management of children presenting with asymptomatic papilloedema in our centre.

Methods

- Retrospective review of 98 pre-pubertal children referred into East of England (EOE) IIH service between 2018-2022 was conducted. There are ~6.24 million people in EOE.

Results

- Seventeen children with asymptomatic papilloedema were referred to our tertiary hospital from the district general hospital
- 10 were female and 7 were male. Median age at presentation was 10 years.
- Only 2 children were in obese category.

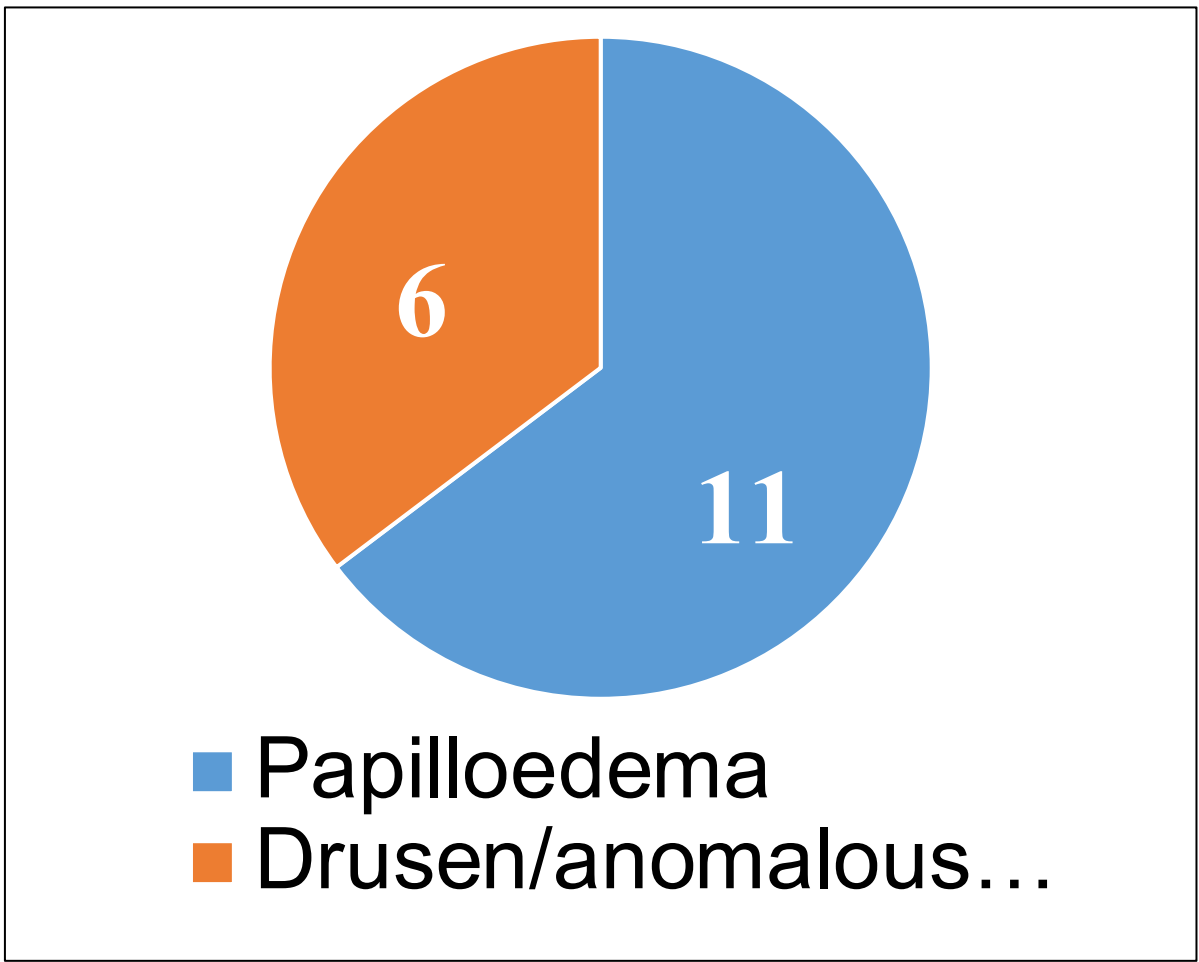


Figure 1. Paediatric Ophthalmology review at tertiary centre

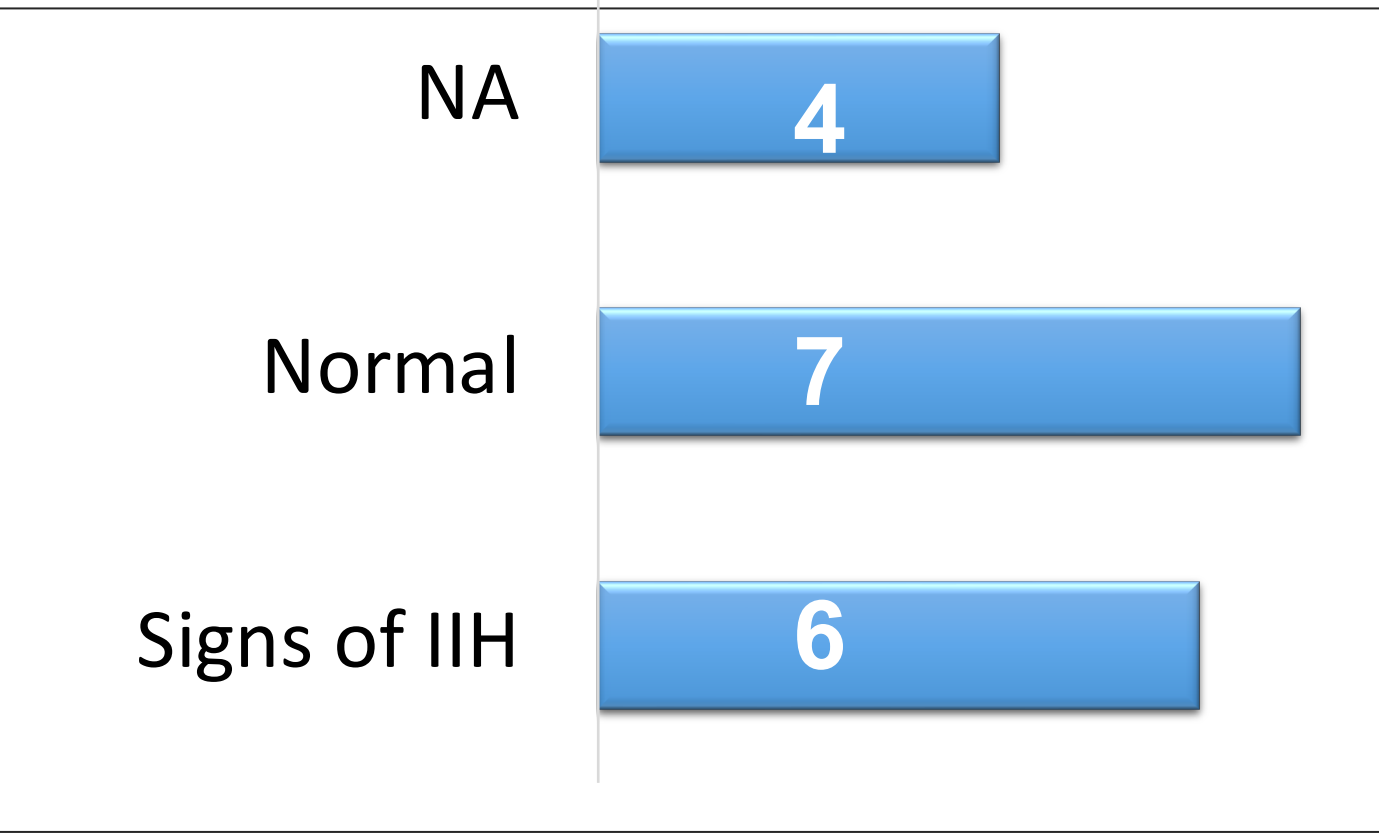


Figure 2. MRI and MRV/NA- Not Available

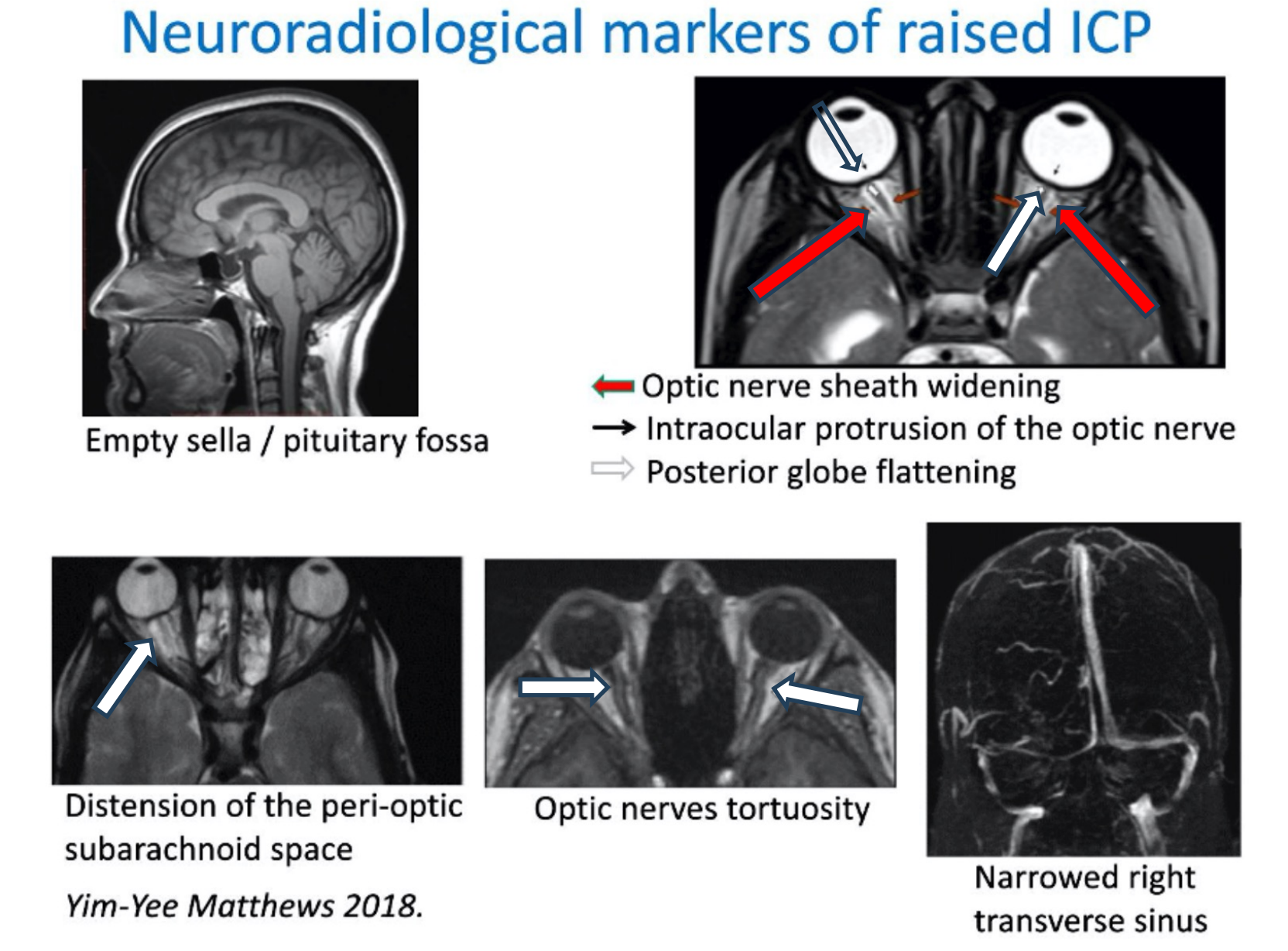


Figure 3. MRI findings in IIH (Paediatric FOAMed – M Bacon, L Hartley)

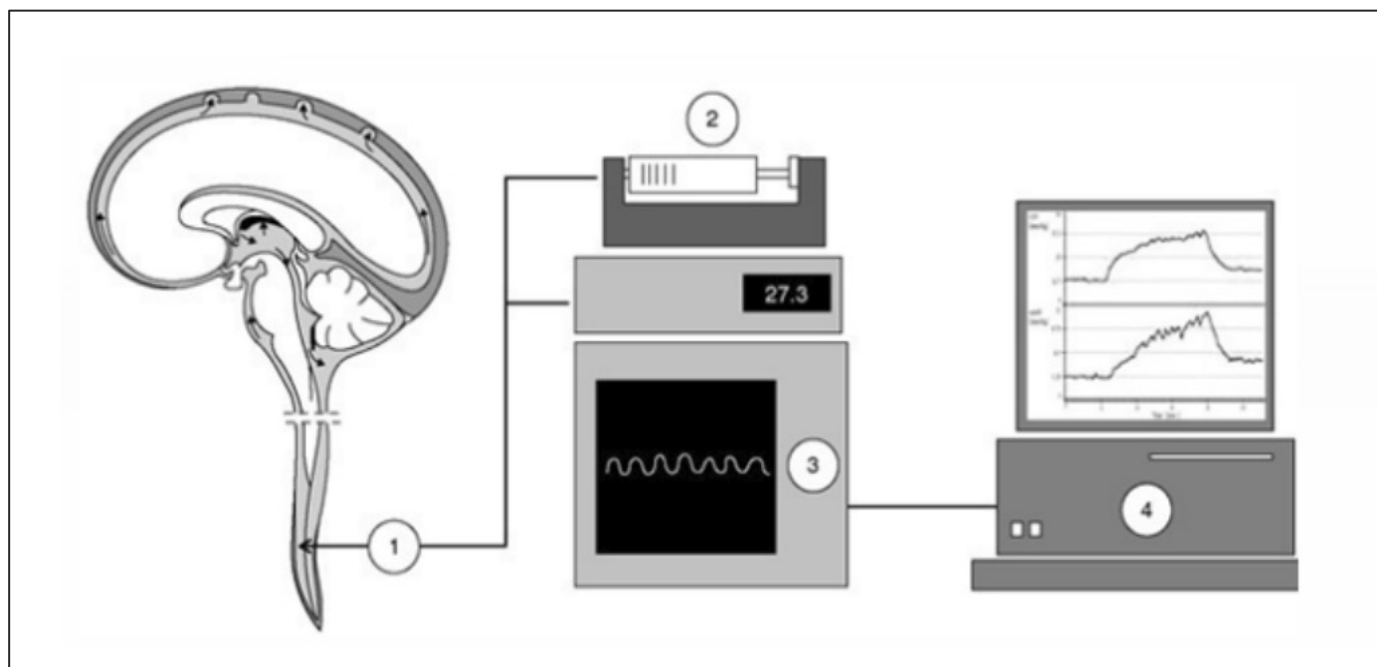


Figure 4. CSF infusion study (Paediatric FOAMed – M Bacon, L Hartley)

- CSF infusion studies (CSF pressure recording over 20-30 min with transducer measuring in mmHg)¹ was performed in 6 children and raised pressure (median value-20.86mmHg) was noted in 4 children.
- Acetazolamide was commenced in all 4 children with raised pressures.
- Ongoing follow up noted in 3 children and recurrence was noted on stopping acetazolamide in 2 and medication was re-started.

- CSF-studies were not performed in 5 children with mild papilloedema, with close monitoring by Ophthalmology and Neurology. Papilloedema spontaneously resolved in 4 with mean follow-up duration of 16.2 months.
- Ongoing follow up for 18 months in 1 child.

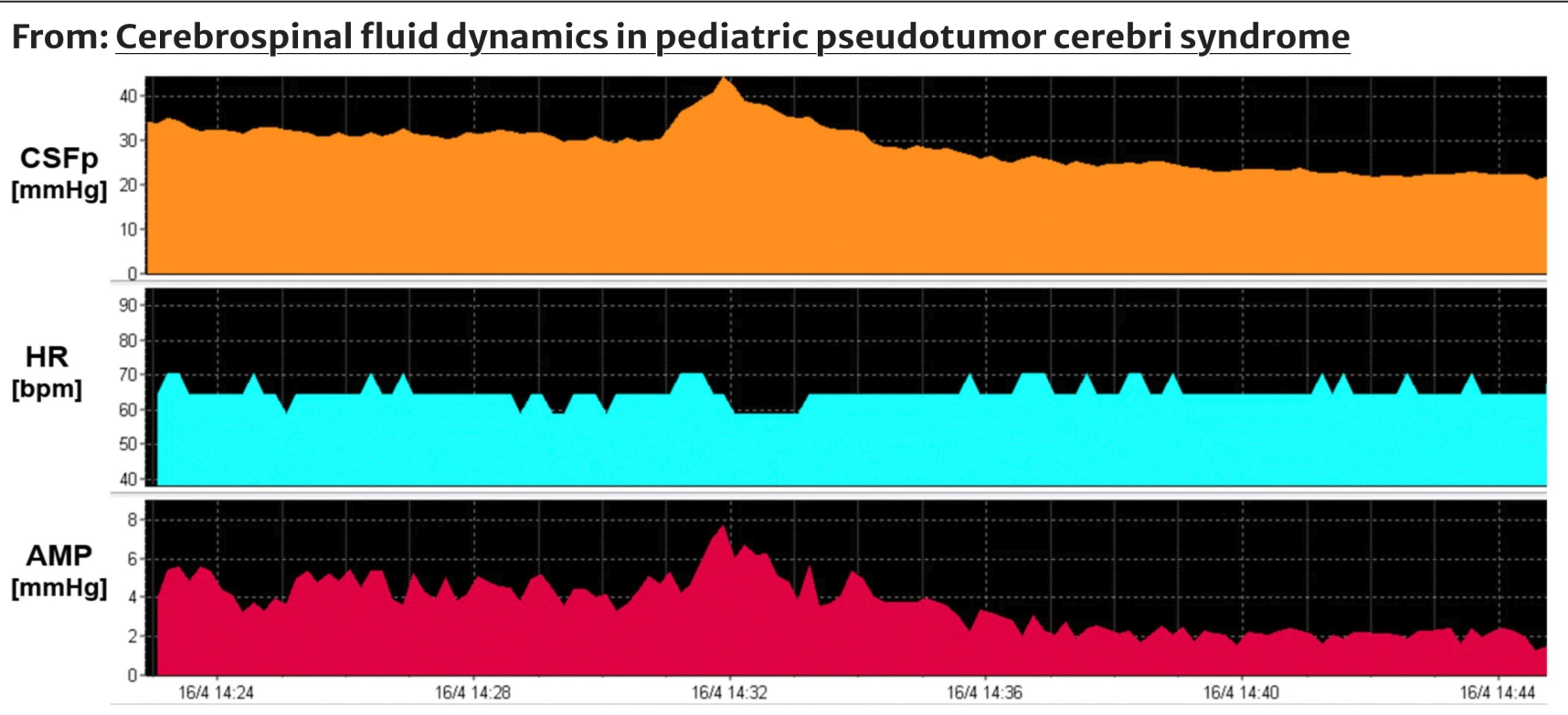


Figure 5. CSF dynamics during infusion study¹

Reference – ¹ Lalou, AD *et al.* Cerebrospinal fluid dynamics in paediatric pseudotumor cerebri syndrome.(2020)

Conclusions

- This review highlights that children with asymptomatic papilloedema need careful MDT assessment with neurology and ophthalmology.
- There is risk of over diagnosis of IIH in this group and about 50% of children need lumbar punctures and treatment.
- In children with mild papilloedema, normal vision and no field deficits, close monitoring can be done. Our experience shows that there is resolution of papilloedema spontaneously in some children.

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