



# Audit of the management of paediatric orbital and pre-septal cellulitis and the role of specialist input in line with published guidelines

Youssra Al Hajji<sup>1</sup>, Yasmin Cabdi<sup>1</sup>, Varsha Kadaba<sup>2</sup>, Tina Kipioti<sup>2</sup>

<sup>1</sup>College of Medical and Dental Sciences, University of Birmingham, <sup>2</sup> University Hospitals Birmingham NHS Foundation Trust

## Objectives

Orbital cellulitis is a rare but serious bacterial infection of the eye that is more commonly seen in the paediatric population and has the potential for serious long-term consequences if not managed appropriately.<sup>1</sup> This audit aims to assess the compliance of management of orbital and pre-septal cellulitis with local and national guidelines (BIPOSA, Royal College of Ophthalmologists) by analysing clinical findings, treatment, specialist input and patient outcomes.<sup>2</sup>

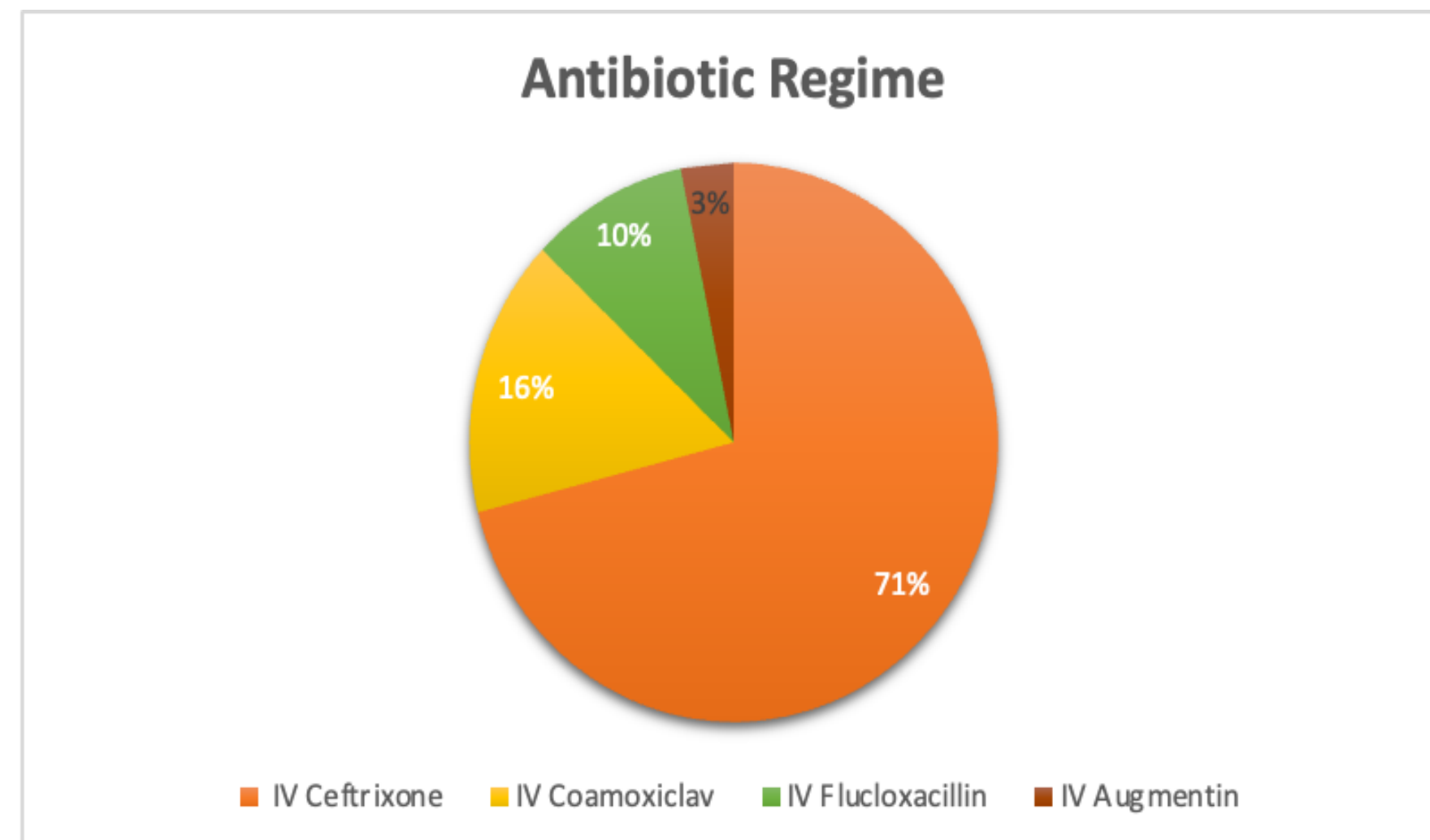
## Methods

A retrospective analysis of 44 paediatric patients that presented to A&E between January 2020 and August 2022 was performed. Data was collected on I.V. antibiotic choice, timepoints of specialist ophthalmology and/or ENT input and length of hospital stay.

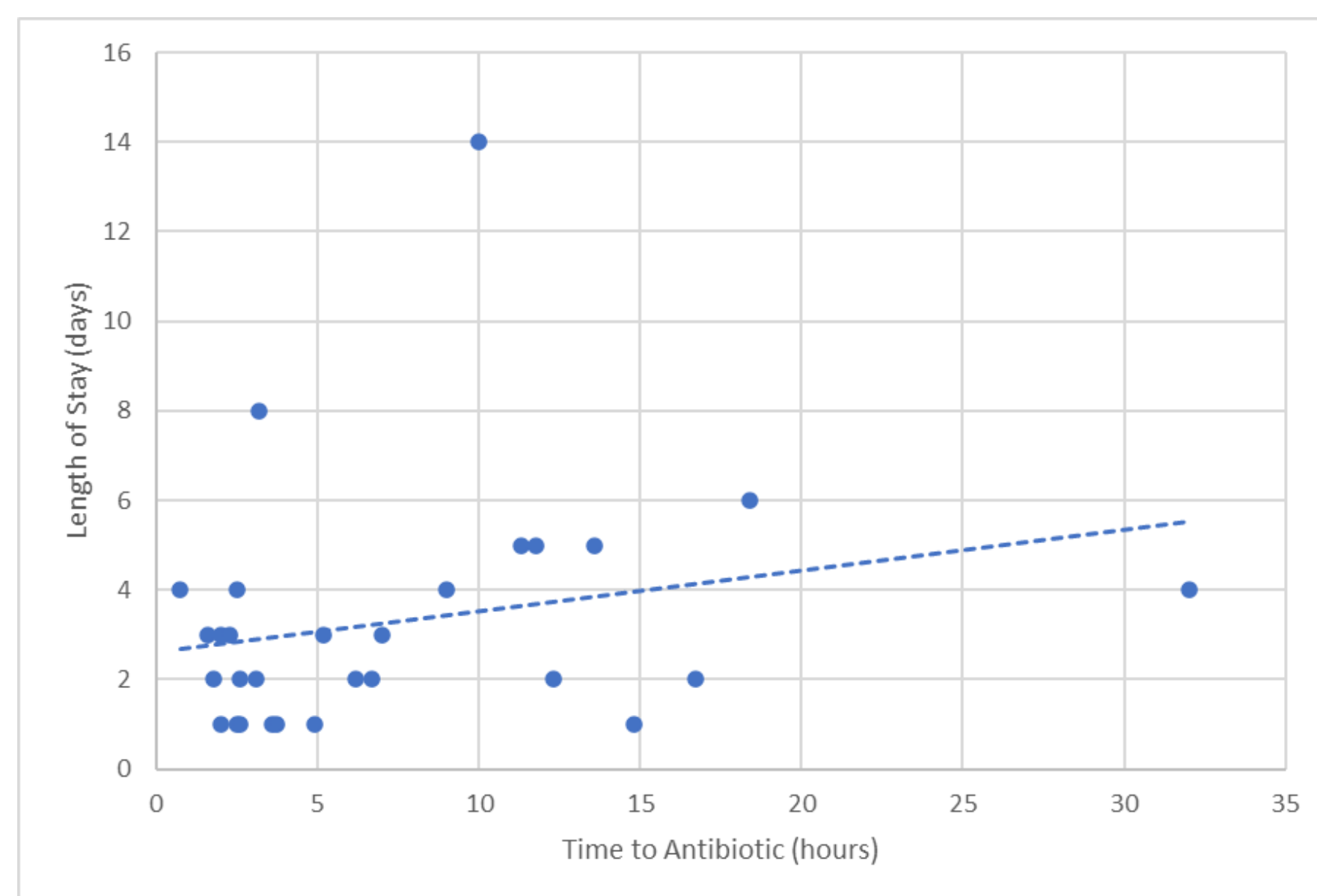
## Conclusion

Orbital and pre-septal cellulitis in the paediatric population needs close monitoring and timely intervention with the appropriate management (antibiotics and imaging). Where necessary, specialist teams need to be involved early in the care. In units with fewer paediatric/orbital ophthalmologists, orthoptists could be utilised. We have proposed a new, revised guideline for management of this condition within our department.

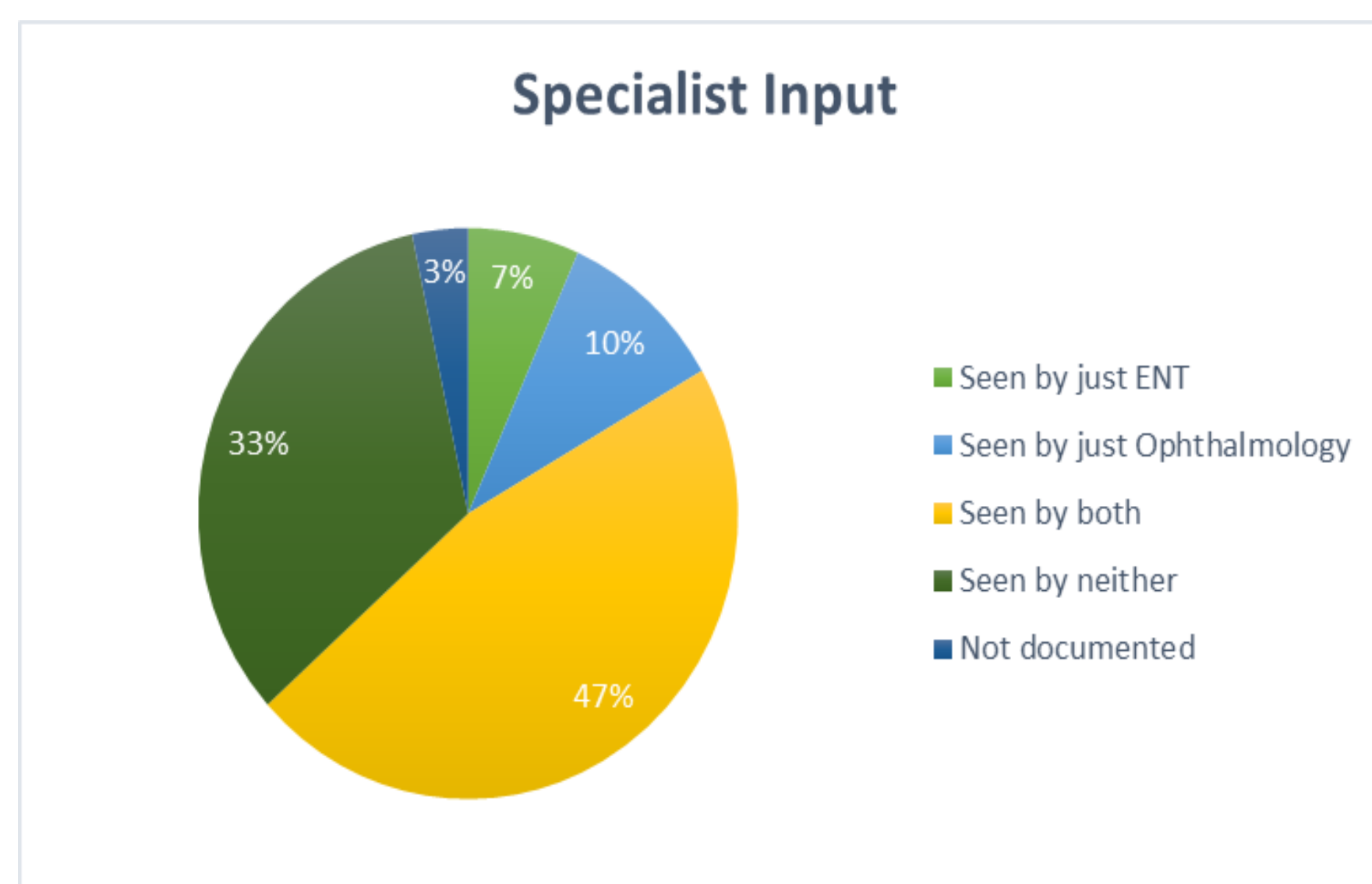
## Results



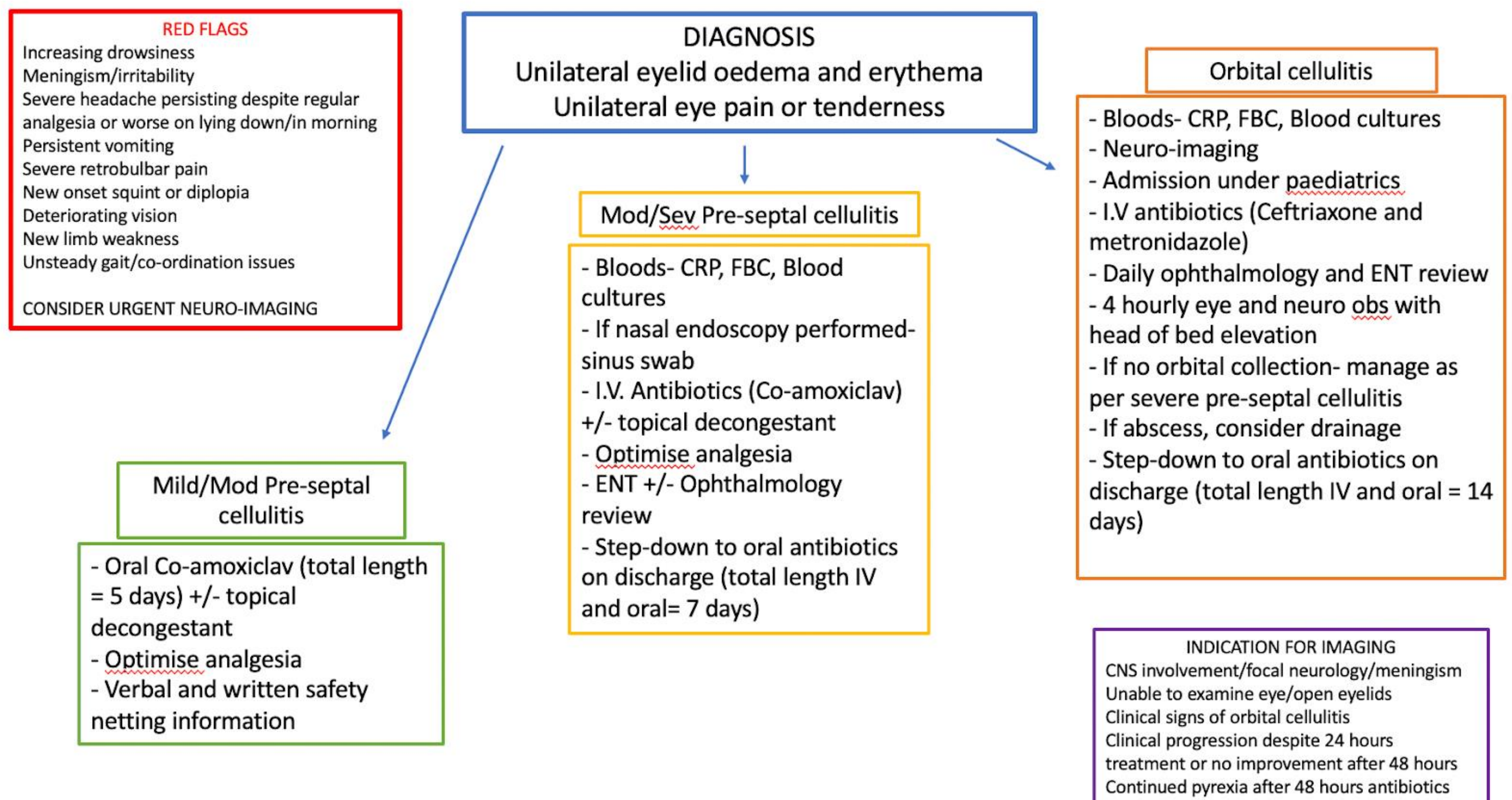
71% received 1<sup>st</sup> line antibiotic as per local antibiotic guidelines



Trend towards increased length of stay based on time to first antibiotic dose (range 30 mins- 33 hours)



33% not receiving any specialist input from Ophthalmology/ENT and 37% of inpatients did not have outpatient follow up



## References

- Danishyar A, Sergent SR. Orbital Cellulitis. StarPearls. 2022. [Cited 2024 February 10]. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK507901/>
- Kipioti, T. Preseptal and Orbital cellulitis in Children. [internet] University Hospitals Birmingham. Local Trust Guidelines. [cited 2024.02.10].