



A RETROSPECTIVE ANALYSIS OF SURGICAL DRAINAGE OF ORBITAL ABSCESSSES AT MREH

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Introduction

Orbital abscess is a serious complication of orbital cellulitis. Most occur due to infectious spread from paranasal sinuses.¹ Main presenting symptoms are periorbital swelling, proptosis, ophthalmoplegia, diplopia.



Figure 1: Superior Wall Abscess²

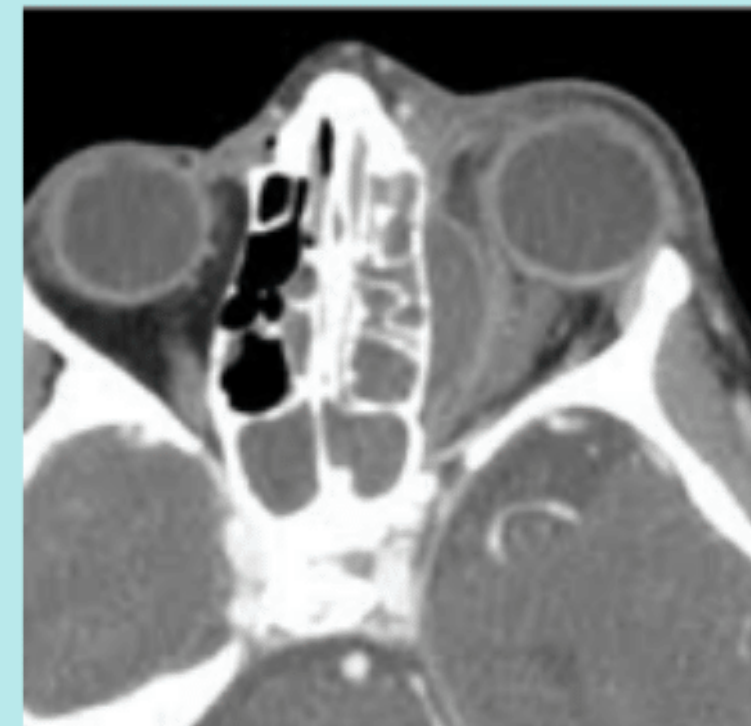


Figure 2: Medial Wall Abscess³

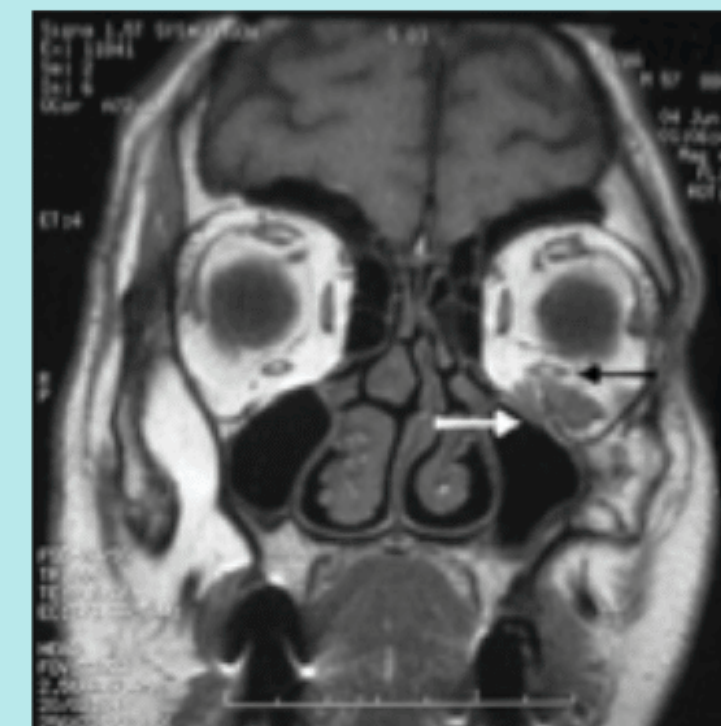


Figure 3: Inferior Wall Abscess⁴

Management: conservative with IV abx or surgical drainage

Surgical Drainage:

Oculoplastics (OCP) or ENT

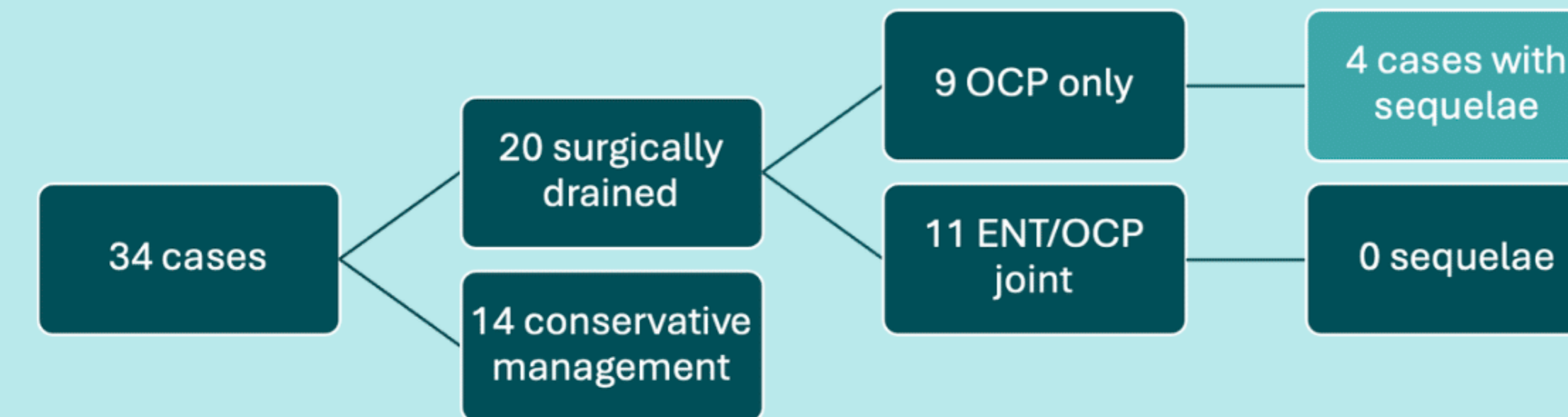
- Medial wall

Joint OCP/ENT approach in:

- Lateral/Superior wall
- Uncertain diagnoses
- Unresolved sinus infection with abscess refilling

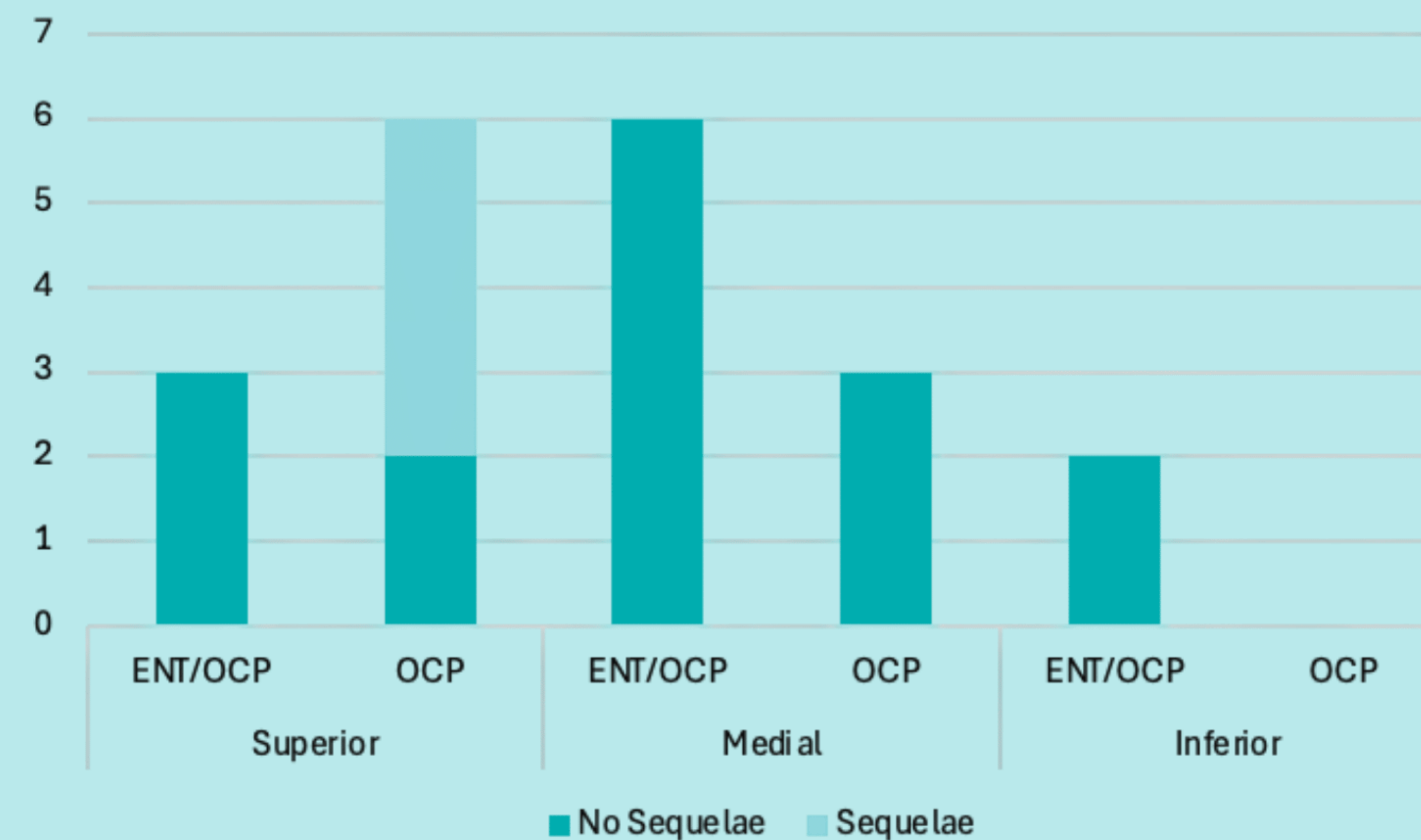
A joint approach addresses orbital and sinus components of infection, aiming to reduce recurrence risk. Not always done due to resource and capability constraints.

Results

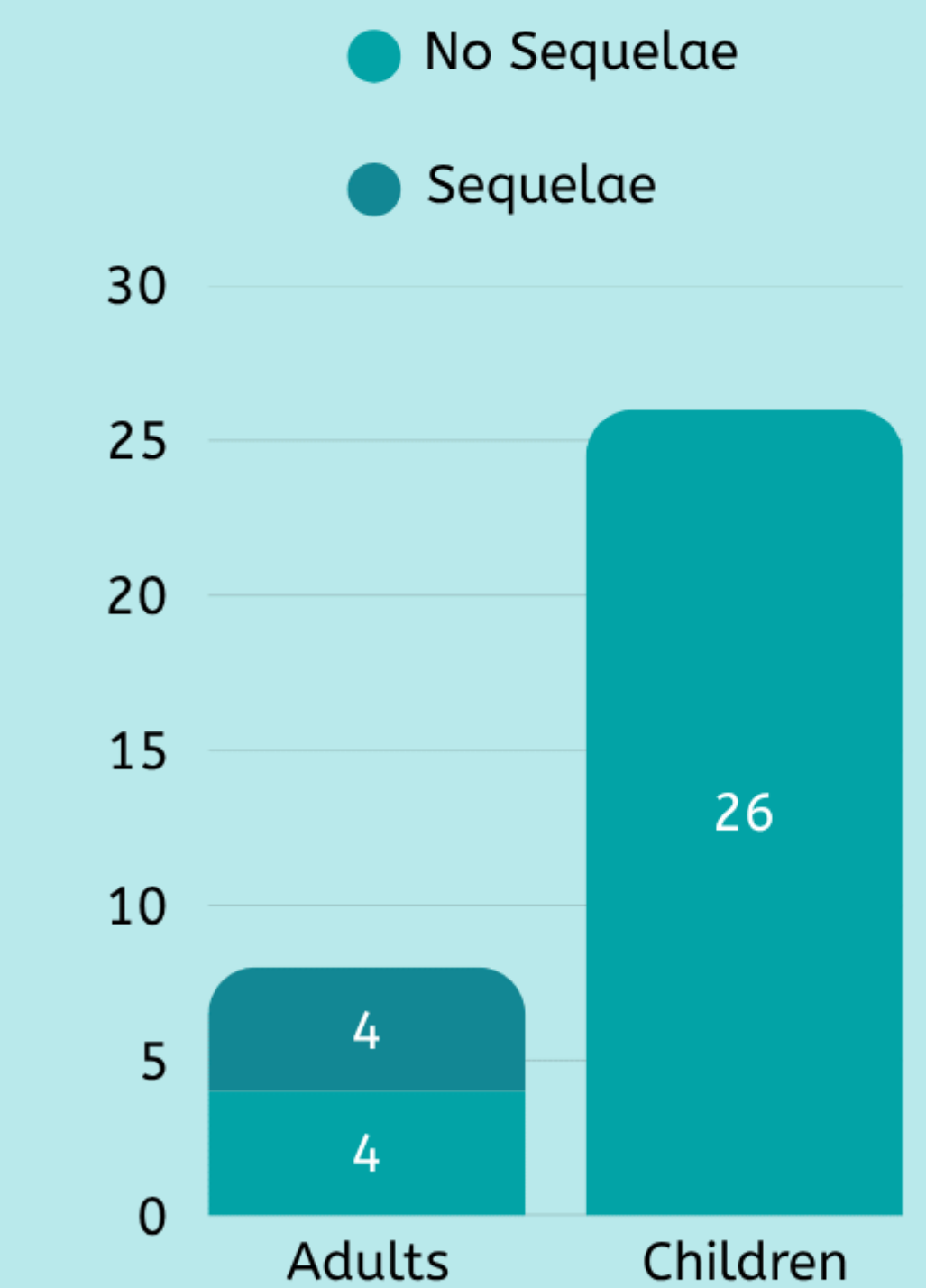


Surgical Approach	No Sequelae n (%)	Sequelae n (%)	p-value (Fisher's Exact Test)
ENT/OCP (joint) (n = 11)	11 (100%)	0 (0%)	–
OCP only (n = 9)	5 (55.6%)	4 (44.4%)	0.026*

Patients who underwent OCP drainage without ENT sinus drainage had a significantly higher rate of sequelae than combined ENT/OCP drainage



All 4 cases with sequelae occurred in **superior** abscesses drained by **OCP**



8/34 were adults, 4 cases with sequelae were in **adults**

Methodology

MREH's EPR searched 01/12/2020 to 08/03/2025. **152** records screened, **34** eligible patients identified. Inclusion criteria: radiologically identified abscess. Exclusion criteria: preseptal collection, cellulitis + no progression to abscess, no abscess radiologically

Key Findings

- All cases with sequelae occurred in patients who had abscess drainage **without ENT sinus drainage**
- All cases with sequelae involved **superiorly located** orbital abscesses
- Only eight out of the thirty-four cases were adults, but all recurrence occurred in **adults**

Conclusion

Our findings suggest that **superiorly located orbital abscesses drained by OCP without concurrent sinus drainage by ENT are at greater risk of recurrence**. A joint ENT and OCP surgical approach may reduce the need for reintervention and lead to more favourable outcomes.

References

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4. Muñoz-Guerra MF, González-García R, Capote AL, Escorial V, Naval Gías L. Subperiosteal abscess of the orbit: an unusual complication of third molar surgery. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2006;102(5):e9–e13.

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