WOMEN'S HEALTH AND PAEDIATRICS

PAEDIATRIC DEPT

Periorbital (Pre-Septal) / Orbital Cellulitis

Amendments			
Date	Page(s)	Comments	Approved by
April 2015	New Guideline		Paediatric Guideline Group
March 2018		Whole document review – no changes	Paediatric Guideline Group
Sept 2024		Whole document review – updated antibiotic guidelines	Paediatric Guideline Group

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In Consultation with:

Ratified by: Paediatric Guidelines Group

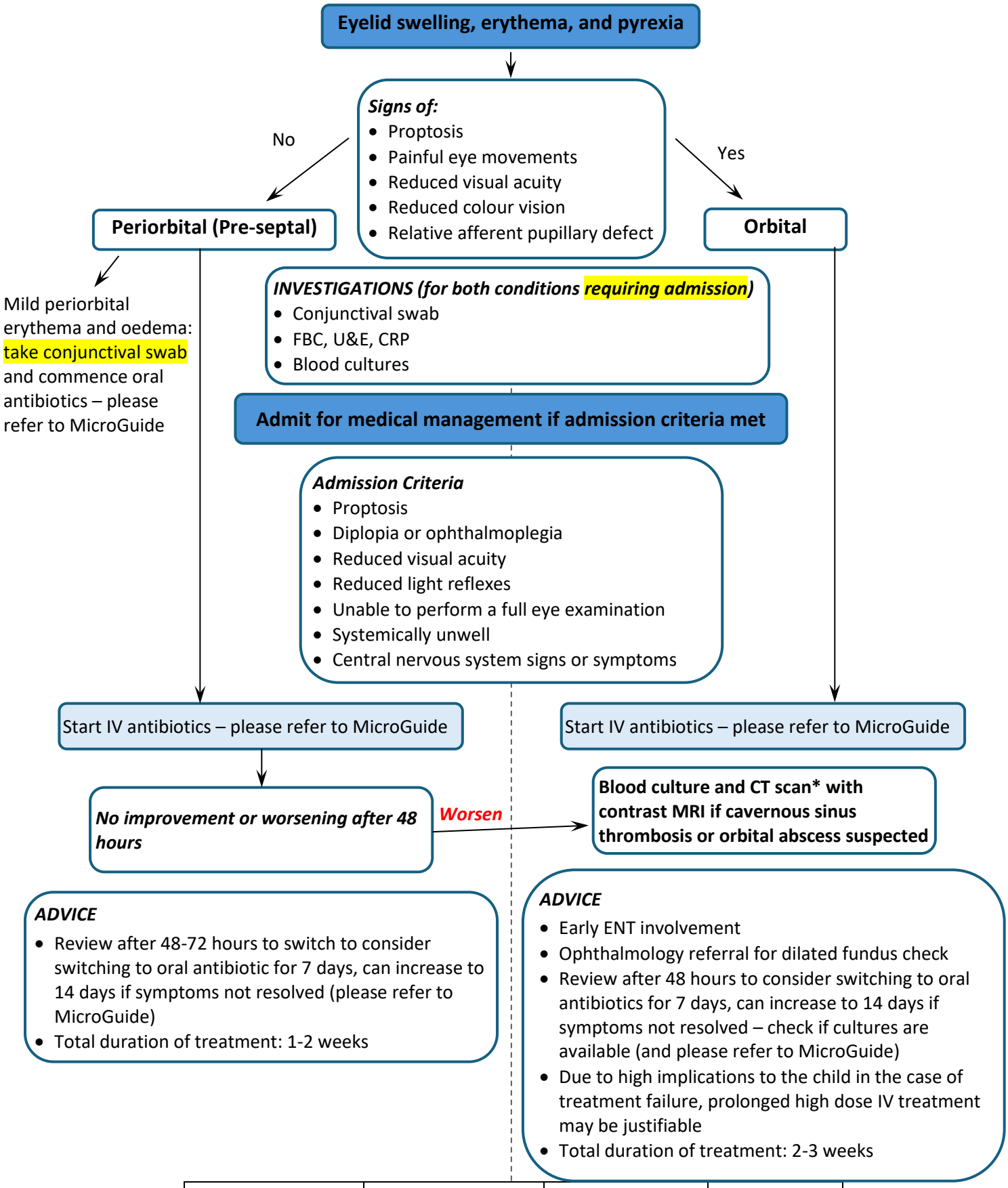
Date Ratified: April 2015

Date Reviewed: Sept 2024 Dr Merna Hassan and Dr Carys Mangan (ratified Dec 2024 with ophthalmology feedback)

Next Review Date: December 2027

Target Audience: Doctors, nurses and support staff working in Paediatrics

Periorbital (Pre-septal) / Orbital Cellulitis



Periorbital (Pre-septal) / Orbital Cellulitis

Indications for CT of orbits and sinus
Proptosis
Diplopia or ophthalmoplegia
Reduced visual acuity
Oedema extending past the eyelid margin
Neutrophils >10
Deterioration despite 24-48 h oral antibiotics
Relative afferent pupillary defect

Aetiology and Background

Periorbital (Pre-septal)
- Only affects soft tissue anterior to the orbital septum
- Associated with recent trauma
- Bacteria: *S. aureus*, *S. pneumoniae*, *S.* pyogenes, H. *influenzae* (before vaccination)

Orbital
- MEDICAL EMERGENCY
- Involves the soft tissue of the orbit posterior to the orbital septum
- Associated with recent sinusitis
- Bacteria: *Streptococcus spp*, *S. aureus*, *H. influenzae* mixed with anaerobes (rarely *Psuedomonas spp*, *Klebsiella*)
- Complications: sub-periorbital or orbital abscess, permanent loss of vision, meningitis, or cavernous sinus thrombosis
- Mixed infection common. Fungal

References
Howe, L, Jones, N; Guidelines for the management of periorbital cellulitis/abscess. Clinical Otolaryngol (2004)
Clinical Management Guidelines: Cellulitis preseptal and Orbital; The College of Optometrists (2011)
Botting et al; Paediatric pre- and post-septal peri-orbital infections are different diseases: A retrospective review of 262 cases. Pediatric Otorhinolaryngology (2008)
Principles and practice of Infectious diseases (Mandell, Douglas, and Bennett's)
Infectious Disease (Cohen, Powderly, and Opal)
Manual of Childhood Infections, The Blue Book (RCPCH)
Nelson's Pediatrics Antimicrobial Therapy (American Academy of Pediatrics)
Harrison's Infectious Disease (Kasper & Fauci)
The infectious Diseases Manual (Wilks, Farrington and Rubenstein)