Peri-Orbital Cellulitis (preseptal and orbital cellulitis)- Paediatric Guideline

Subject:	Preseptal and Orbital Cellulitis
Policy Number	N/A
Ratified By:	Clinical Guidelines Committee
Date Ratified:	April 2015
Version:	1.0
Policy Executive Owner:	Dr N Patel (Clinical Director, Children's Services)
Designation of Author:	Dr Z Saldanha (Paediatric Trainee) Mr S Jain (Consutlant Ophthamologist)
Name of Assurance Committee:	As above
Date Issued:	June 2015
Review Date:	3 years hence
Target Audience:	Paediatric, ophthalmology staff
Key Words:	Peri-Orbital Cellulitis, preseptal cellulitis and orbital cellulitis

Version Control Sheet

Version	Date	Author	Status	Comment
1.0	April – June 2015	Dr Z Saldanha (Paediatric Trainee) Mr S Jain (Consutlant Ophthamologist)	LIVE	New guideline approved with suggested amendments at CGC April 2015. Amendments made June 2015

➢ Criteria for use

Children (0-16 years) with suspected periorbital cellulitis.

➢ Background/ introduction

Preseptal Cellulitis is an infection of anterior portion of the eyelid not involving the orbit. Orbital Cellulitis is an infection of the contents of the orbit. It is the more serious condition which can lead to loss of sight (3-11% patients) [1]. Preseptal cellulitis is more common with both infections being more common in children than adults.

	Preseptal Cellultis	Orbital cellulitis
Likely causative organisim	- Staphylococcus aureus - Streptococcus pneumoniae - Anaerobes	- Staphylococcus aureus - Group A streptococcus - Streptococcus pneumonia

➢ Inclusion/ exclusion criteria

Diagnosis is mainly clinical

Preseptal cellulitis features

- Occular pain, eye lid swelling, erythema

- Normal vision and eye movements

- No proptosis

Orbital Cellulitis features

- Occular pain, eye lid swelling, erythema

- Ophthalmoplegia

- Proptosis

- Painful eye movements

More serious complications include sepsis, meningitis, cavernous sinus thrombosis and optic nerve compression.
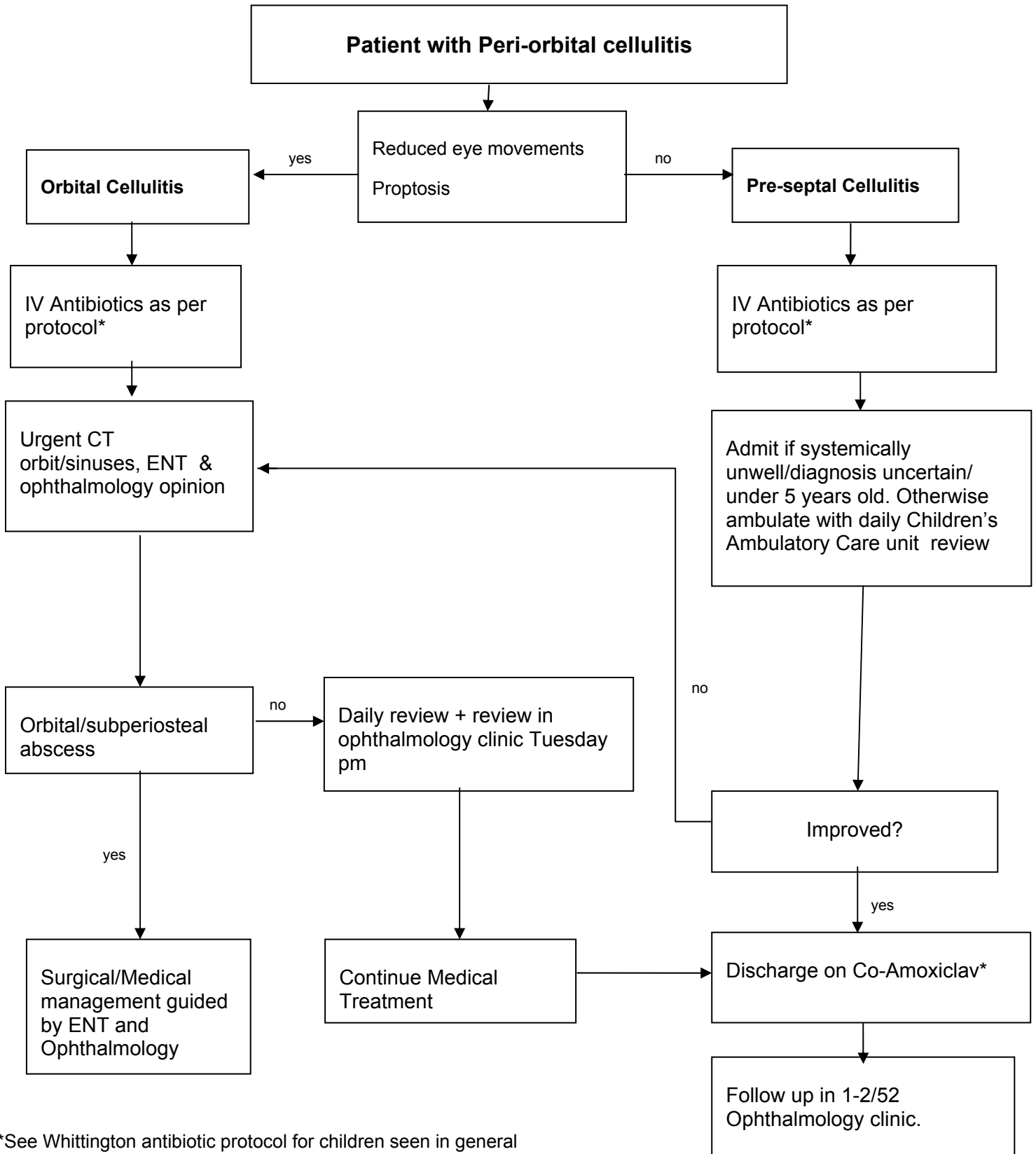
➢ Clinical management

Refer all to the paediatric team

Preseptal Cellulitis

- Bloods including blood cultures

- IV Ceftriaxone first line (See antibiotic protocol for children seen in general paediatrics)

- When clinically improving continue course with oral antibiotics to complete 7 days.

- If no improvement after 48 hours of IV antibiotics consider imaging.

- If systemically well patient can be ambulated on IV antibiotics with daily CAU review.

Orbital Cellulitis

- Manage as above.

- **Urgent CT orbits** and discussion with oncall ophthalmology

- See pathway below

Patient with Peri-orbital cellulitis

Orbital Cellulitis ← yes — Reduced eye movements / Proptosis — no → **Pre-septal Cellulitis**

IV Antibiotics as per protocol*

IV Antibiotics as per protocol*

Urgent CT orbit/sinuses, ENT & ophthalmology opinion

Admit if systemically unwell/diagnosis uncertain/ under 5 years old. Otherwise ambulate with daily Children's Ambulatory Care unit review

Orbital/subperiosteal abscess — no → Daily review + review in ophthalmology clinic Tuesday pm

no

Improved?

yes

Surgical/Medical management guided by ENT and Ophthalmology

Continue Medical Treatment → Discharge on Co-Amoxiclav*

yes

Follow up in 1-2/52 Ophthalmology clinic.

*See Whittington antibiotic protocol for children seen in general paediatrics

> **Contacts (inside and outside the Trust including out-of-hours contacts)**

Within Working Hours:

Paediatric Registrar- bleep 3111

Ophthalmology Registrar- contact via switch board.

Consultant paediatric ophthalmology clinic Tuesday afternoon- Mr Jain (consultant)

Out of Working Hours (after 5pm weekdays, all day weekends)**:**

Paediatric Registrar- bleep 3111

Ophthalmology and ENT out of hours contact Royal Free Hospital via switch board

> **References (evidence upon which the guideline is based)**

[1] Gappy C, Archer S, Barza M. Preseptal cellulits. UpToDate review. March 2014

[2] Barts and The London NHS trust, Paediatric Orbital Cellulitis guideline.

[3] Antibiotic Protocols for children seen in General Paediatrics, Whittington Health Guideline

To be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval

		Yes/No	Comments
1.	**Does the procedural document affect one group less or more favourably than another on the basis of:**		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
	• Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
2.	**Is there any evidence that some groups are affected differently?**	No	
3.	**If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?**	No	
4.	**Is the impact of the procedural document likely to be negative?**	No	
5.	**If so can the impact be avoided?**	N/A	
6.	**What alternatives are there to achieving the procedural document without the impact?**	N/A	
7.	**Can we reduce the impact by taking different action?**	N/A	

If you have identified a potential discriminatory impact of this procedural document, please refer it to the Director of Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact the Director of Human Resources.

Checklist for the Review and Approval of Procedural Document

To be completed and attached to any procedural document when submitted to the relevant committee for consideration and approval.

	Title of document being reviewed:	Yes/No	Comments
1.	**Title**		
	Is the title clear and unambiguous?	Yes	
	Is it clear whether the document is a guideline, policy, protocol or standard?	Yes	
2.	**Rationale**		
	Are reasons for development of the document stated?	Yes	
3.	**Development Process**		
	Is it clear that the relevant people/groups have been involved in the development of the document?	Yes	
	Are people involved in the development?	Yes	
	Is there evidence of consultation with stakeholders and users?	Yes	
4.	**Content**		
	Is the objective of the document clear?	Yes	
	Is the target population clear and unambiguous?	Yes	
	Are the intended outcomes described?	Yes	
5.	**Evidence Base**		
	Are key references cited in full?	N/A	
	Are supporting documents referenced?	N/A	
6.	**Approval**		
	Does the document identify which committee/ group will approve it?	Yes	
7.	**Dissemination and Implementation**		
	Is there an outline/plan to identify how this will be done?	Yes	
8.	**Document Control**		
	Does the document identify where it will be held?	Yes	
9.	**Process to Monitor Compliance and Effectiveness**		

	Title of document being reviewed:	Yes/No	Comments
	Are there measurable standards or KPIs to support the monitoring of compliance with and effectiveness of the document?	Yes	
	Is there a plan to review or audit compliance with the document?	Yes	
10.	**Review Date**		
	Is the review date identified?	Yes	
	Is the frequency of review identified? If so is it acceptable?	Yes	
11.	**Overall Responsibility for the Document**		
	Is it clear who will be responsible for co-ordinating the dissemination, implementation and review of the document?	Yes	

Executive Sponsor Approval			
If you approve the document, please sign and date it and forward to the author. Procedural documents will not be forwarded for ratification without Executive Sponsor Approval			
Name		Date	
Signature			
Relevant Committee Approval			
The Director of Nursing and Patient Experience's signature below confirms that this procedural document was ratified by the appropriate Governance Committee.			
Name		Date	
Signature			
Responsible Committee Approval – only applies to reviewed procedural documents with minor changes			
The Committee Chair's signature below confirms that this procedural document was ratified by the responsible Committee			
Name		Date	
Name of Committee		Name & role of Committee Chair	
Signature			

Tool to Develop Monitoring Arrangements for Policies and guidelines

What key element(s) need(s) monitoring as per local approved policy or guidance?	Who will lead on this aspect of monitoring? Name the lead and what is the role of the multidisciplinary team or others if any.	What tool will be used to monitor/check/observe/Assess/inspect/ authenticate that everything is working according to this key element from the approved policy?	How often is the need to monitor each element? How often is the need complete a report ? How often is the need to share the report?	What committee will the completed report go to?
Element to be monitored	**Lead**	**Tool**	**Frequency**	**Reporting arrangements**
CT scan obtained promptly for all suspected cases of orbital cellulitis	**Dr C Fertleman**	**Audit**	**3 years**	**Paediatric audit meeting**