## CLINICAL PATHWAY:

# **Preseptal & Orbital Cellulitis**

THIS PATHWAY SERVES AS A GUIDE AND DOES NOT REPLACE CLINICAL

Inclusion Criteria: eye swelling concerning for preseptal or orbital cellulitis

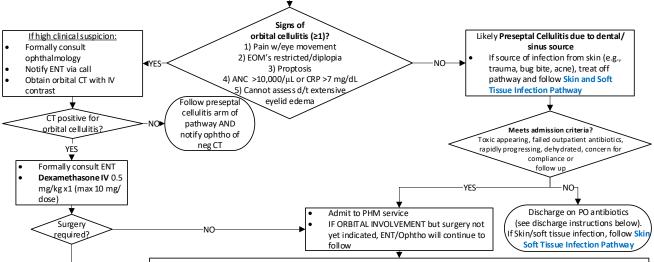
Exclusion Criteria: evidence of non-cellulitic cause of eye swelling (e.g., allergy, chalazion, conjunctivitis, dacryocele), supero-lateral abscess on CT (will need orbital surgeon), posterior table erosion of the frontal sinus bone with brain abscess, any patient requiring neurosurgical involvement

## Initial Evaluation:

- History including diplopia, systemic symptoms
- Physical exam findings, including:
  - Extent of eyelid edema/erythema
  - Presence of proptosis
  - Ocular motility/pain with eye movement
  - Pupillary reaction/afferent pupillary defect
  - Vision with Snellen chart, if possible
- Labs: CBC w/differential, CRP (unless mild preseptal cellulitis signs and/or attending discretion); If ocular discharge, obtain bacterial culture

#### \*Place Ophthalmology consult for:

- Urgent calls for any orbital involvement (clinically or on CT) <u>OR</u>
- If ENT taking to OR



#### Inpatient Management:

- Patients >5 years old: General pediatric provider to complete vision checks with Snellen chart on admission and BID (If unable to complete, must document in chart.)
- Continue to monitor for development of orbital cellulitis
- NPO after midnight if strong possibility of surgery
- If orbital cellulitis confirmed on CT: dexamethasone IV 0.5 mg/kg x1 (max 10 mg/dose) if not already given

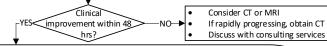
## Pre-Septal or Orbital Cellulitis without CNS involvement on imaging:

- Ampicillin/Sulbactam based on ampicillin component: 200 mg/kg/day div q6hr (max 2,000 mg ampicillin/dose)
- If PCN allergy: Clindamycin PO/IV 30-40 mg/kg/day div q8hr (max 600 mg/dose) AND Ceftriaxone IV 75 mg/kg/day div q12hr (max 2,000 mg/dose)
- If concern for MRSA, consider addition of:
  - Vancomycin IV: <52 weeks PMA<sup>†</sup>/about <3 mo old: 15 mg/kg q8hr or as determined by pharmacy based on estimated AUC; 52 weeks PMA<sup>‡</sup>/about ≥3 months old − 11 years old: 70 mg/kg/day div q6hr; ≥12 yrs old: 60 mg/kg/day div q8hr

### If Orbital Cellulitis with concern for CNS involvement on imaging, treat off pathway with the following:

- Ceftriaxone IV 100 mg/kg/day div q12hr (max 2,000 mg/dose) <u>AND</u> Metronidazole 30 mg/kg/day IV div q8hr (max 500 mg/dose)
  If concern for MRSA, consider <u>addition</u> of ONE time dose with subsequent doses directed by ASP:
  - Vancomycin IV: <52 weeks PMA<sup>†</sup>/about <3 mo old: 15 mg/kg x1; ≥52 weeks PMA<sup>†</sup>/about ≥3 months old 11 years old: 17.5 mg/kg x1 (max 750 mg/dose); ≥12 yrs old: 20 mg/kg x1 (max 1 g/dose)
- Consult Neurosurgery and Infectious Disease

<sup>†</sup>PMA (Post-Menstrual Age) = gestational age + postnatal age



Discharge Criteria: Vision back to baseline, clinical improvement, afebrile, follow up plan in place

- **Discharge Antibiotics:** [Duration: 10 days or longer as determined by ENT based on extensiveness of disease] Preferred PO antibiotic if no PCN allergy, OR If on Ampicillin/Sulbactam (Unasyn):
- o Preferred: Amoxicillin/Clavulanate PO ES (600 mg/5 ml) 90 mg/kg/day div TID (max 1 g of amoxicillin/dose); Alternate if ≥40 kg: Amoxicillin/Clavulanate PO (500/125 tablets) 1 tablet PO TID
- If PCN allergy, or if on Clindamycin IV with Ceftriaxone:
  - O Clindamycin PO 30-40 mg/kg/day div q6-8hr (max 600 mg/dose) AND
  - Cefdinir PO 14 mg/kg/day div BID (max 300 mg/dose) or Levofloxa cin PO 6 mo-4 yrs: 20 mg/kg/day div q12hr; 5-9 yrs: 14 mg/kg/day div q12hr; 10 yrs: 10 mg/kg once daily (max 750 mg/day)
- If on Vancomycin:

YES

Admit to ENT service

PHM consult for co-

manage ment

surgery)

Ophtho to follow (needs to

document vision PRIOR to

ADD Clindamycin PO 30-40 mg/kg/day div q6-8hr (max 600 mg/dose) (continue Amoxicillin/Clavulanate or Cefdinir/Levoflaxacin as appropriate)
 Discharge Instructions:

Follow up with PCP; Complete course of antibiotics, Ophthalmology f/u in 1-2 weeks if involved during admission

Connecticut Children's