

# OPHTHALMIC HOSPITALIST INTEREST GROUP

## NEWSLETTER

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### Announcements

#### AAO/OHIG Online Community

What are OHIG members saying about seeing COVID positive patients, hospital consult billing, and papilledema consult requests in the ER at 2am?

Join the conversation on the AAO [OHIG Community](#)! It has 75 members and growing!

#### Welcome New Members!

Excited to have you join OHIG! Please verify your information on the [OHIG website](#). Thank you!

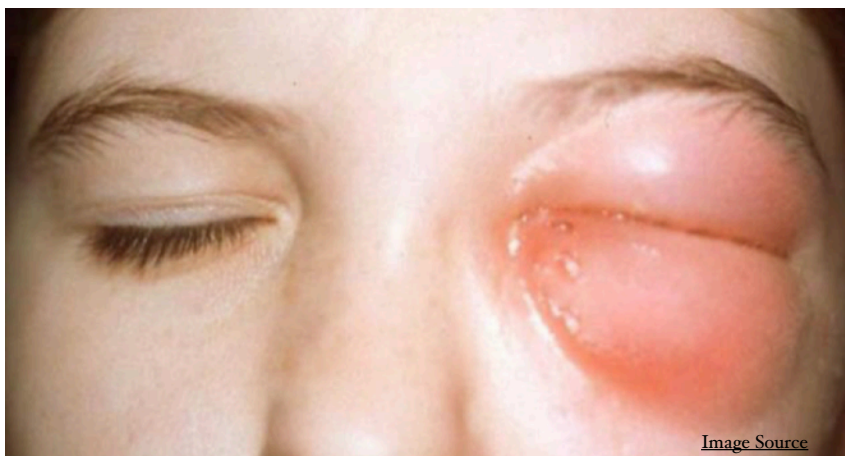


Image Source

### Articles

#### [Role of Oral Corticosteroid in Orbital Cellulitis,](#) [American Journal of Ophthalmology, 2013](#)

Systemic corticosteroid for infectious orbital cellulitis can be variable. This article encourages its use reporting a low overall risk of exacerbating infection.

#### [Radiologic Imaging Shows Variable Accuracy in](#) [Diagnosing Orbital Inflammatory Disease and Assessing](#) [Its Activity, Scientific Reports, 2020](#)

Orbital imaging is a critical part of discerning causes of orbital inflammation yet its diagnostic accuracy can be limited. This article highlights specific conditions that benefit in particular from imaging.

#### [COVID 19 as a Possible Cause of Severe Orbital](#) [Cellulitis, Journal of CFS, 2021](#)

An interesting case showing a possible association between COVID and orbital inflammation.

## PEARLS



### Resident Education Resource

#### Moran CORE

Clinical Ophthalmology Resource for Education

Open source ophthalmology education for students, residents, fellows, healthcare workers, and clinicians. Produced by the Moran Eye Center in partnership with the Eos Library.

#### PRESEPTAL VS ORBITAL CELLULITIS



A helpful teaching resource from Moran Eye Center in Utah on differentiating preseptal vs orbital cellulitis.

[Click here](#)

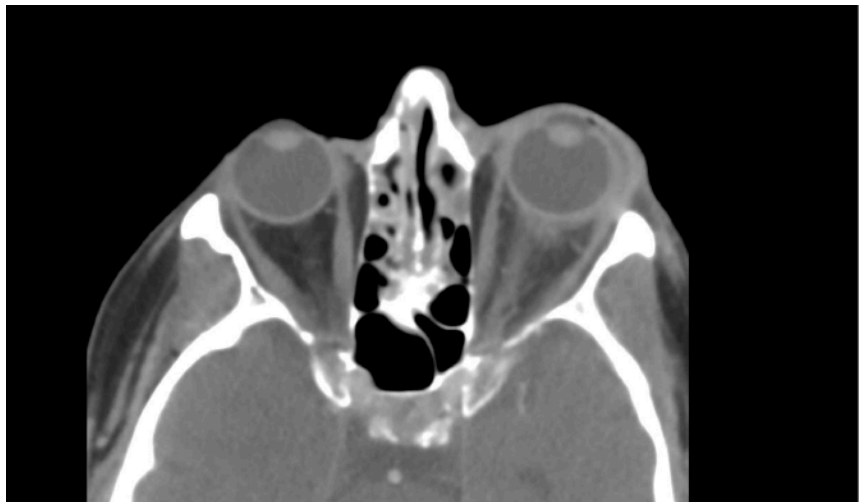
### Institutional Guidelines for Preseptal and Orbital Cellulitis from Northwell Health



An example of how institutional guidelines can help provide a consistent approach to patient care for preseptal and orbital cellulitis at a major academic referral center.

See page 4 for protocol diagram and the email PDF attachment for a more detailed algorithm.

## CONSULT ROUNDS



You are paged about a 45 year old male with history of HTN, HLD, and recent intermittent epistaxis who presents to the ER with left sided periocular swelling x 3 days.

On exam he is 20/20 OD and 20/40 OS with a trace left APD. His intraocular pressures are 15 and 24. His anterior segment is notable for left proptosis with chemosis and moderate generalized restriction. Dilated funduscopic exam of the left eye is wnl. Evaluation of the right eye is also wnl.

CT orbital imaging shows left preseptal soft tissue thickening with orbital fat stranding concerning for orbital cellulitis. There is opacification of the ethmoid, sphenoid, and right maxillary sinuses as well. No orbital abscess is seen.

The patient is started on broad spectrum IV Vancomycin and Unasyn. ENT is also consulted for sinus disease and initiates their usual standard regimen of Afrin, nasal saline spray, and 8mg IV decadron x 1 dose.

The patient responds well with interval improvement of his left proptosis, periocular edema, and motility. He is transitioned to oral antibiotics and discharged home in stable condition.

Three days later, the patient returns to the ER. He now complains of new right sided periocular swelling, proptosis, and pain. His previous left eye orbital findings are no longer present.

Repeat orbital CT imaging shows new inflammatory stranding within the right orbit without abscess. Interestingly, there is interval improvement of his previous left preseptal edema, orbital stranding, and sinusitis.

There is suspicion for an orbital inflammatory process although infection could not be ruled out. An inflammatory work up is sent and the patient is re-admitted for repeat broad spectrum antibiotics. His clinical course worsens over the next 24 hours.

On hospital day 2, the patient develops new bilateral ocular injection consistent with anterior scleritis helping to confirm a likely inflammatory etiology. He is given 1 gram of IV Solumedrol with dramatic clinical improvement in a matter of hours. He receives two more doses of IV Solumedrol and is put on a slow oral prednisone taper.

Laboratory work up is notable for positive ANCA titers which confirm a diagnosis of Granulomatous with Polyangiitis (GPA) with bilateral sequential orbital inflammation, bilateral anterior scleritis, and sinusitis.

The patient is followed in the Rheumatology and Uveitis clinic. He is doing well on steroid sparing immune modulating therapy.

Case Comments: Orbital cellulitis is an important condition warranting urgent hospital admission. CT imaging, systemic antibiotics, and occasional surgery are standard of care. Systemic steroids are also often adjunct therapy which may mask an underlying inflammatory diagnosis. GPA is a great example of a “masquerade diagnosis” which can present with orbital inflammation and sinusitis, mimicking an infectious orbital process.

Relevant Articles:

Ocular Manifestations of Granulomatosis with Polyangiitis: A Review of the Literature: [Click here](#)

Would love to hear how others are managing orbital cellulitis in terms of routine systemic steroid use. Share your answer and see what others have to say on the **AAO/OHIG Community!** [Click here](#)

# Evaluation and Management of Pediatric Preseptal and Orbital Cellulitis

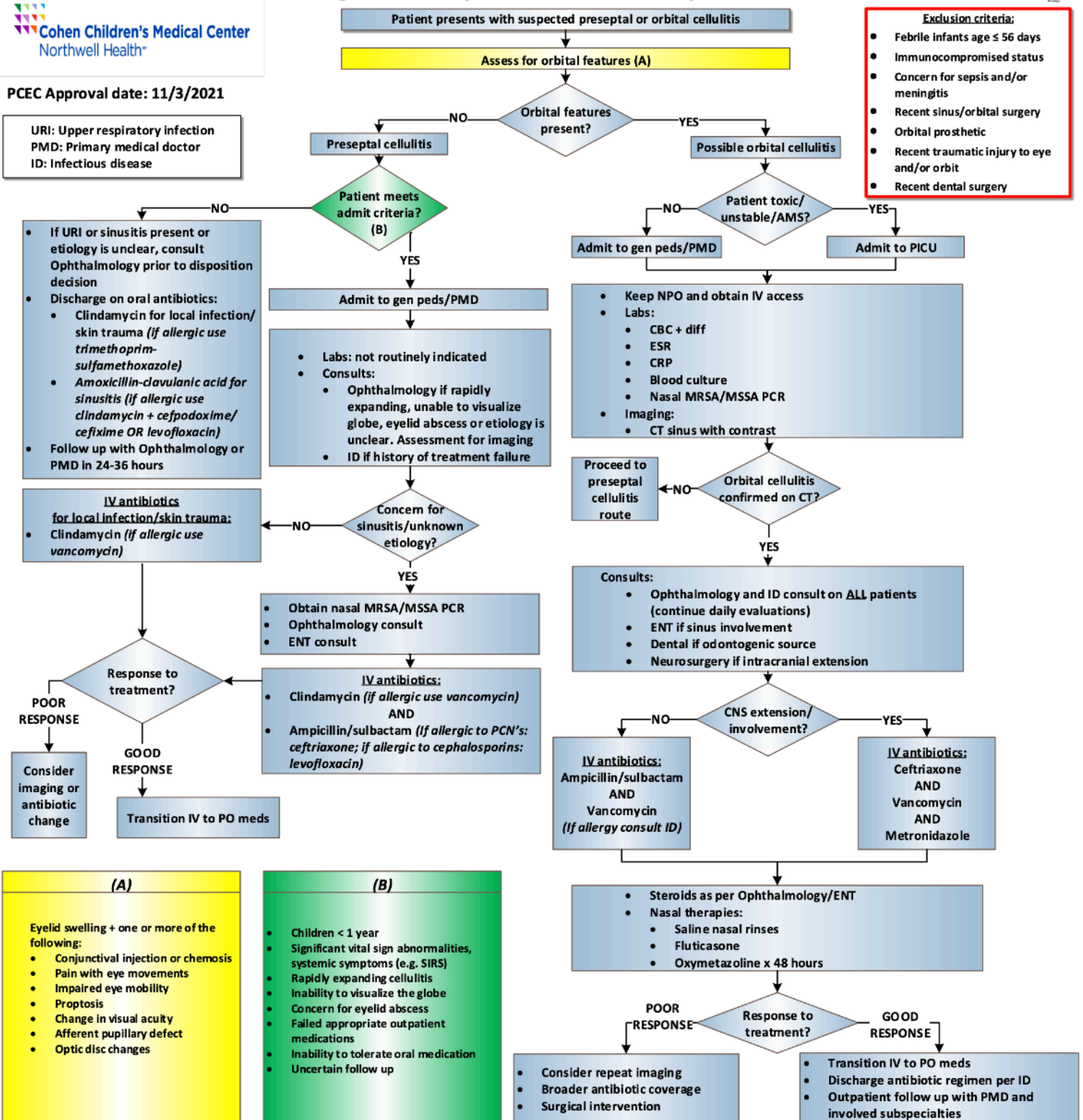


PCEC Approval date: 11/3/2021

URI: Upper respiratory infection  
PMD: Primary medical doctor  
ID: Infectious disease

## Exclusion criteria:

- Febrile infants age  $\leq 56$  days
- Immunocompromised status
- Concern for sepsis and/or meningitis
- Recent sinus/orbital surgery
- Orbital prosthetic
- Recent traumatic injury to eye and/or orbit
- Recent dental surgery



This document is intended as a general guideline. The healthcare professional must use the appropriate judgment dependent on the particular clinical situation.