

# OPHTHALMIC HOSPITALIST INTEREST GROUP

## NEWSLETTER

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### Announcements

#### Join the Community!

Have a question or topic about inpatient/ER consults? Share on the [AAO/OHIG community](#)! Log in with your AAO username

#### OHIG Topic Wishlist

Have a case you would like to feature in an OHIG newsletter? We welcome your ideas and expertise. Email [ohig@ohig.org](mailto:ohig@ohig.org).

#### Welcome New Members!

Thanks for joining OHIG! Please verify your information on the [OHIG website](#).

#### New OHIG Website Resource Center

Thanks for joining OHIG! Please verify your information on the [OHIG website](#).



Image Source

### Articles

#### [Orbital Blowout Fractures: Time for a New Paradigm, Ophthalmology, 2018](#)

An editorial highlighting potential benefits of prolonged observation in a large majority of orbital fracture cases.

#### [Incidence of Ocular Injury in Visually Asymptomatic Orbital Fractures, OPRS, 2009](#)

A review of orbital fracture patients that show how visually asymptomatic patients are less likely to have ocular injury requiring emergent evaluation.

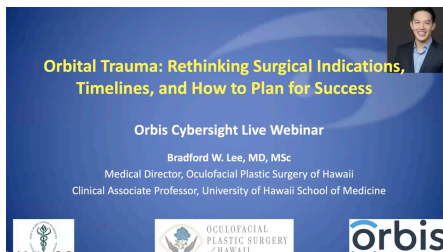
#### [Characteristics of Orbital Floor Fractures in the US from 2006-2017, Ophthalmology, 2021](#)

Incidence, characteristics, and costs of orbital fractures presenting to the ED across the US over a 12 year period.

## PEARLS



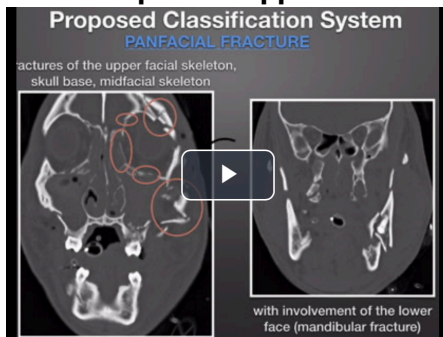
### Rethinking Surgical Indications, Timelines, and How to Plan for Success



A helpful trauma Lecture with Dr. Bradford Lee from Oculofacial Plastic Surgery of Hawaii.

[Click here](#)

### A Novel Practical Classification of Orbital and Orbitofacial Fractures - an Oculoplastics Approach



A video from the AAO featuring Dr. Gangadhara Sundar who reviews demographic and clinical modifiers that can aid with decision making around threshold and timing of interventions.

[Click here](#)

## CONSULT ROUNDS



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You are the on-call ophthalmologist at a busy level I trauma referral center.

It's not even 10:00am and you have already received multiple ophthalmology consult requests including 12 screening eye exams for patients with orbital fracture on CT. Every patient has some form of "eye redness" per the primary trauma service. One patient might have an open globe.

You are the only available on-call ophthalmologist for the entire hospital and wonder how to best triage these orbital fracture consult requests. It is impossible to see every patient ASAP, realistically maybe not even everyone today.

You ask the primary team to check a visual acuity realizing it is has been notoriously wrong in the past.

You ask the ED to check an IOP but they tell you that their tonopen is broken.

You ask which patients have proptosis and periocular edema (reportedly all of them).

You ask which patients have visual symptoms. A few patients have no visual complaints, some have blurry vision or diplopia,

others are unable to comment since they are intubated and sedated.

You review the orbital CT of all these patients, many of whom have large orbital fractures with no radiographic concern for muscle entrapment or orbital hemorrhage. One patient definitely has an open globe with a “squashed grape sign” on CT.

You see the open globe first which ends up taking a considerable amount of time as you arrange for OR repair. You do your best to see your other consults, some of whom are not cleared for dilation, others who are off the floor for various procedures, others who you evaluate and confirm a normal eye exam.

You are tired at the end of the day and wonder how you can sustain seeing this high and seemingly unending number of orbital fracture patients in the future.

You look to the literature for some guidance. Will you find an answer?

Yes.

Case Comments and Featured Article:

Orbital fracture consults can often represent a high proportion of ophthalmology consult requests at trauma centers. To help manage growing patient volumes, evidence-based protocols have since been developed to help assist ophthalmologists with effective and safe triage measures.

The University of Florida spearheaded a joint study involving their ophthalmology and oral maxillofacial service (OMFS).

The study includes both a retrospective and prospective arm of orbital fracture patients that were used to determine when the lack of an ophthalmology consult adversely affected patient outcomes. Factors including visual acuity, pupillary abnormalities, EOM's, hyphema, open globe, IOFB, retrobulbar hemorrhage, and other clinical findings were reviewed.

The authors published the results their triage protocol for screening eye exams among orbital fracture patients. Overall, the authors concluded that a routine ophthalmology consult is not warranted in visually asymptomatic patients with orbital fractures who require surgical repair. This protocol has now been adopted for use at other institutions with positive results.

Evidence Based Protocol for Ophthalmology Consult for Orbital Fractures, Journal of Oral Maxillofacial Surgery, 2021.

## OHIG Survey Questions

**Question 1:** Do you have an established triage protocol for orbital fracture consults at your institution?

Select all that apply

- A) No, our ophthalmology consult service sees all orbital fracture patients
- B) No, we evaluate patients on a case by case basis
- C) Yes, we have an existing triage protocol, please specify below
- D) Other: please specify below

**Question 2:** Who performs the majority of orbital fracture repairs at your institution?

Select all that apply:

- A) Oculoplastics covers all surgical repairs
- B) Oculoplastics covers cases involving muscle entrapment
- C) Oculoplastics covers cases involving orbital foreign bodies
- D) ENT
- E) Facial Plastics
- F) Oral and Maxillofacial Surgery (OMFS)
- G) Other: please specify below

Please share your responses/questions on the AAO/OHIG community page: <https://aao.mobilize.io/main/groups/47315/lounge>

### Ophthalmology Consult Policy For Orbital Fractures

#### **PURPOSE:**

Facial trauma often prompts consults for multi-disciplinary care. This protocol is designed to provide an evidence-based approach for screening eye exams in the setting of acute orbital fracture patients within a specific recommended time frame.

Various studies have shown a low incidence of severe ocular injury in visually asymptomatic patients with orbital fractures who undergo surgical repair (1, 2). The presence or absence of subjective visual symptoms also appears to be a sensitive predictor of severe ocular injury compared to visual acuity measurements (1) which are often unreliable in the acute trauma setting. Many trauma patients are critically ill and unable to provide subjective visual symptoms and should undergo ophthalmic screening (3).

The overall goal of this protocol is to provide appropriate ophthalmic care for hospital-based trauma patients and reduce the frequency of unnecessary dilated eye exams which are not without burden or risk for patients who may require close neurologic monitoring following head trauma.

#### **PERSONS AFFECTED:**

This consult policy applies to adult ophthalmology consult requests in the inpatient and emergency room setting.

#### **DEFINITIONS:**

1. **Emergent Orbital Fracture Consults (require evaluation as soon as possible):** These are immediate vision-threatening scenarios. Examples:
  - a. Orbital compartment syndrome requiring lateral canthotomy/cantholysis (severe proptosis, retrobulbar hemorrhage, tense eyelids, inability to visualize the eye)
  - b. Extraocular muscle entrapment
  - c. Ruptured globe
  - d. Intraocular foreign body
2. **Urgent Orbital Fracture Consults (require evaluation within 90 minutes):** These are scenarios in which evaluation can result in a change in management for an acute condition. Examples:
  - a. Subjective visual symptoms
    - Reduced vision
    - Vision loss
    - Visual flashes/floaters
  - b. Eye pain
  - c. Fixed or irregular pupil
  - d. Hyphema
  - e. Orbital foreign body
  - f. Patient is intubated/sedated or unable to provide subjective visual symptoms
3. **Routine Orbital Fracture Consults (may be deferred to the outpatient setting or discussed with the on-call ophthalmologist):** These are scenarios in which evaluation is unlikely to result in a significant change in acute management. Examples:
  - a. Adult patient who is awake and alert with no new visual symptoms
  - b. Pre-existing eye condition or prior ocular surgery (retinal detachment repair, corneal transplant, etc) which may predispose to a higher risk of adverse ocular sequelae from periorbital trauma. These cases can be reviewed with ophthalmology on a case-by-case basis.

**PROCEDURES:****1. Ophthalmology Requests for Emergent Orbital Fractures Consults.**

If the outcome of a timely ophthalmology consult evaluation will have a significant effect on acute patient management or visual outcome, these patients will be evaluated as soon as possible.

**2. Ophthalmology Requests for Urgent Orbital Fracture Consults.**

If the outcome of a timely ophthalmology consult evaluation will have a significant effect on acute patient management or visual outcome, these patients will be evaluated within 2 hours of requested consultation.

**3. Ophthalmology Requests for Routine Orbital Fracture Consults.**

If the outcome of an ophthalmology consult is unlikely to result in a critical change in acute management for a patient, the request may be deferred to the outpatient setting. Adult orbital fracture patients who are awake, alert, and have no new subjective visual symptoms can be evaluated in comprehensive ophthalmology clinic after hospital discharge within 1 month. If a patient has a pre-existing eye condition or history of prior ocular surgery (retinal detachment repair, corneal transplant), cases may be reviewed with the on-call ophthalmologist for further triage guidance.

**References:**

1. Incidence of Ocular Injury in Visually Asymptomatic Orbital Fractures, Mellama P et al, Ophthalmic Plastic & Reconstruction Surgery, July-August, 2009.
2. Evidence-Based Protocol for Ophthalmology Consult for Orbital Fractures, Journal of Oral and Maxillofacial Surgery, Rockafellow A et al, February 2021.
3. Incidence and Severity of Asymptomatic Ocular Injury in Adult and Pediatric Orbital Fractures, Etheridge T et al, Orbit, July 2022.

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