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Area	Trauma Surgical Critical Care
Applicability	Erlanger Health - Baroness

In-Patient Practice Management Guideline for Facial Fractures

1. Process/Procedure Description

The purpose of this policy is to develop and provide a systematic approach to the care of the adult trauma patient with facial fractures

2. Who Should Read This Process/Procedure?

Plastic Surgery Residents, Plastic Surgery Attending, Emergency Department Attending, Emergency Department Resident, Trauma Residents, Trauma Attending

3. Process/Procedure

Step:	Process Instructions/Description:
	After the appropriate work-up Plastic Surgery should be consulted to evaluate all mandible fractures.
	• Any facial fracture will be evaluated by the plastic surgery service at the request of the trauma team or the emergency room staff. • Any facial fracture will then be treated as deemed by the attending plastic surgeon after evaluation by the plastic surgery resident. • Any simple/non-displaced fractures may be discharged from the emergency room and scheduled for outpatient treatment as needed. • Any displaced mandible fractures may be stabilized with bridle wires or other means then discharged and scheduled for outpatient surgery.

- Open wounds should be irrigated and closed.
    - Open mandible fractures should be treated as soon as possible with Augmentin PO or Unasyn IV for no longer than 24 hrs after injury. Antibiotics should not be continued for more than 24 hrs postoperatively.
        - Cefoxitin IV may be used if anaphylactic penicillin allergy is present.
    - Displaced posterior wall frontal sinus fractures should be treated with Augmentin PO or Unasyn IV.
        - Cefoxitin IV may be used if anaphylactic penicillin allergy is present.
        - Antibiotic therapy should not exceed 72 hours.
    - Basilar skull fractures with or without CSF leak do not require antibiotic prophylaxis.
    - The need for possible antibiotic use in patients with CSF leaks present greater than 7 days will be based on clinical presentation and symptomology.
    - Presence of pneumocephalus does not require antibiotic therapy.
    - Patients with basilar skull fracture and CSF leak should receive pneumococcal vaccination in accordance with IDSA guidelines.
        - For unimmunized adults: 13-valent vaccine 1st followed by 23-valent
          8 weeks later.
        - For adult who have already received 13-valent: Give 23 valent vaccine x 1 (*Per 2017 IDSA guidelines).
    - Closed mid face fractures do not require any antibiotic therapy.
    - Definitive fixation will be performed as soon as possible.
    - The decision to admit isolated facial fractures to the hospital or to discharge from the emergency room will be made by the attending plastic surgeon.

References:

? Domingo, Fernando MD; Dale, Elizabeth MD; Gao, Cuilan PhD; Groves, Cynthia; Stanley, Daniel MD; Maxwell, Robert A. MD; Waldrop, Jimmy L. MD A single-center retrospective review of postoperative infectious complications in the surgical management of mandibular fractures, Journal of Trauma and Acute Care Surgery: December 2016 - Volume 81 - Issue 6 - p 1109-1114 doi: 10.1097/TA.0000000000001232

? Tunkel AR, Hsbun R, Bhimraj A, et al. 2017 Infectious Diseases Society of America's Clinical Practice Guidelines for Healthcare-Associated Ventriculitis and Meningitis. Clinical Infectious

Diseases: 2017; 64(6):e34-e65.
*Please note current literature review inadequately addresses posterior wall frontal sinus fractures.

Approval Signatures

Step Description	Approver	Date
VP Approval	Jessica Holladay: VP & ACNO Surg & Trauma Svcs	04/2025
Trauma Services Committee Approval	Stephanie Spain: Trauma Prgm Mgr Adult	03/2025
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Applicability

Erlanger Health - Baroness