

General Surgery Consult Guidelines

1. HERNIA

- **Inguinal Hernia:** Refer for outpatient clinic visit if hernia is reducible (even if the patient complains of severe pain) or has a chronic incarceration and no acute changes.
- **Acutely incarcerated IH or strangulated Inguinal Hernia:** (bowel obstruction or bowel compromise). ED physician must attempt reduction as long as there is no concern for bowel compromise. If successful refer to outpatient clinic, if not successful please call surgery consult. CT scan is not necessary.
- **Incisional/Ventral/Umbilical:** Call surgery consult only for signs for acute incarceration, bowel obstruction, signs of bowel compromise, elevated WBC >12. Discuss with surgery before ordering a CT scan.

2. **SKIN ABSCESS:** ED should drain if fluctuant area < 5cm (do not count area of cellulitis/erythema in this measurement). I & D should be adequate no small cruciate incisions for abscess > 2 cm since this is inadequate drainage. Referral to nursing wound care clinic for dressing changes.

3. R/O NECROTIZING SOFT TISSUE INFECTION CONSULTS:

LRINEC score must be >6 to merit a consult (Na and WBC very predictive). Consults should be directed to the correct service by location on body. Any upper extremity consult goes to upper extremity on call, foot/ankle consult podiatry, Scrotum consult GU, trunk consult general surgery, leg consult ortho or general surgery.

4. **APPENDICITIS:** Workup must include CBC w diff, U/A, pregnancy test female <55 y/o. ED physician must do an ALVARADO score prior to consultation or ordering of any imaging.
- **Alvarado score <4** – d/c to home, no CT or surgery consult
 - **Alvarado score 5-8** – CT scan with IV contrast (if renal function OK) and call surgery consult if CT findings suggestive of appendicitis.
 - **Alvarado score >8** – Surgery consult, surgery will decide if they want to get a CT

5. BOWEL OBSTRUCTION:

- Must r/o incarcerated IH hernia first by PE.
- If no hernia, start with 3 view abdominal x-ray to r/o ileus. If ileus then no surgery consult necessary.
- Obtain CBC w/ diff, chem 7, U/A, start IVF and begin resuscitation.
- Place NGT if severe nausea/vomiting or distention.
- CT scan with IV contrast if possible and PO contrast if patient is not extremely distended or has severe nausea/vomiting.
- Call surgery after CT is done.

6. **DIVERTICULITIS:** Obtain WBC with diff, U/A, and CT scan w/ IV contrast.
- Uncomplicated diverticulitis: Stranding wall thickening, or inflamed sigmoid without perforation/abscess consult medicine (no surg. consult)
 - Complicated diverticulitis: Abscess, fistula, large inflammatory mass, free air-surg consult.
7. **GALLBLADDER DISEASE:** Obtain CBC with diff, LFTs, amylase, lipase. Imaging as convenient RUQ US or Ct w/ IV contrast. If bilirubin elevation must image CBD to r/o possible cholangitis, if CBD > 1cm please call GI for ERCP, start antibiotics, admit to medicine.

Tokyo Criteria for Diagnosis of Acute Cholecystitis

- a. PE signs of inflammation
(1) Murphy's sign, (2) RUQ mass/pain/tenderness
- b. Systemic signs of inflammation:
(1) Fever (2) elevated WBC count
- c. Imaging findings: characteristic of acute cholecystitis
US:
Positive Sonographic Murphy sign
Thickened gallbladder wall (>4 mm; if the patient does not have chronic liver disease and/or ascites or right heart failure)
Pericholecystic fluid collection
CT:
Thickened gallbladder wall
Pericholecystic fluid collection
Linear high-density areas in the pericholecystic fat tissue

ACUTE CHOLECYSTITIS MUST HAVE:

- **One item from (a) and one item from (b)**
- **Imaging findings confirm the diagnosis**

8. ACUTE ABDOMEN

If hemodynamically stable do appropriate ED workup (CBC, diff, INR, Chem 7, LFT, CT) and then call surgical consult.

If hemodynamically unstable, start resuscitation, call ICU service and surgery consult. Get portable upright CXR.

9. HEMORRHOIDS:

1. External thrombosed hemorrhoids
>48 hours history, sitz bath, pain meds, Metamucil, colace no need for clinic f/u. Long term fiber is treatment (must get a script Metamucil x 6 weeks)) not “dietary fiber”.

2. Bleeding internal hemorrhoids
 - Hemodynamically stable and **not actively** bleeding: if Hct > 30, colace, referral for colonoscopy if not done in last 2 years. 6 month fiber script. No acute surgery consult needed. GMC can do if no relief after 6 weeks of Metamucil treatment.
 - If actively bleeding in ER call surgery after CBC, INR completed and a DRE has been performed. Start IVF resuscitation ASAP.

2. Perirectal/ Perianal Pain/Abscess
 - Perianal pain
Most likely 1 of 3 diagnoses
 1. Fissure (sitz bath, fiber X 6 weeks, colace, no need for consult from ER)
 2. External thrombosed hemorrhoid (see above)
 3. Perianal abscess (see below)

Abscess must be with 4 cm of the anus otherwise these are buttock abscess and the ER should do the I/D. If within 4 cm of the anus obtain CBC, INR, Chem 7 and call a surgery consult.

TRAUMA

PALO ALTO VA TRAUMA POLICY

The Emergency Room physician will perform standard evaluation of **all** trauma patients that presents to the Palo Alto VA Emergency Room. Patient evaluation and treatment will be based on ATLS principals and will include standard bloodwork, XRAY, CT scans, and procedures as indicated. The ER physician will then make the decision about need for transfer to the closest Level 1 Trauma Center. There will not be a call to the general surgery team to “check” with them about this decision. ER- ER transfer would then be arranged.

Indications for transfer

1. Multisystem trauma that would likely require admission to a trauma center.
2. Hemodynamically stable patients with evidence of chest/abdominal/retroperitoneal hollow viscus or solid organ injury that would reasonably require 24 hour access to an operating room or interventional radiology suite.
3. Hemodynamically stable patients with penetrating neck trauma (must be beyond platysma) within zone 1 and 3.

Zone 1 of the neck is defined as the space from the level of cricoid to clavicle.

Zone 3 of the neck is defined as the space from the skull base to the angle of the mandible.

Indications for care at Palo Alto VA

1. Hemodynamically unstable trauma with abdominal or chest hemorrhage - please do the following **ASAP**

STAT page the following teams

- On call general surgeon (resident and attending)
- Anesthesia and ICU team to help with resuscitation and line placement
- Nursing supervisor to call in the OR nursing staff

Perform the following key tasks

- Damage control resuscitation using O negative PRBC for resuscitation instead of crystalloids
- Tranexaminic acid administration, type and cross, activation of the massive transfusion protocol
- Pelvic binder if pelvic fracture present

- Place chest drain if indicated for pneumothorax, hemothorax, or hemo-pneumothorax

2. When there is a single system trauma that **would not** require observation for ongoing bleeding then the surgical service that is responsible for that system should be called for consultation.

- Orthopedics for fractures and non-reducible dislocations
- Neurosurgery for traumatic brain injury and spinal injury
- Ophthalmology for ocular injuries
- Plastics/hand for hand fractures or burns
- Facial fractures call alternates monthly between plastics (odd months) and ENT (even months)
- ENT (stat/urgent) for penetrating neck injury limited to zone 2 (from angle of the mandible to the cricoid)

CHEST TRAUMA

- Isolated rib fractures without clinical pneumothorax or hemothorax DO NOT require consultation by Thoracic Surgery unless deemed clinically necessary by the ED staff.
- Rib fractures with CXRs that have no new effusion or pneumothorax should be trialed on oral pain management in the ED. Patients can be discharged from the ED if they have pain control that allows for a strong cough and achievement of 1000cc on incentive spirometer. If pain control is not adequate by oral regimen Medicine will admit patients for isolated rib fracture admissions after a complete trauma evaluation by the ED attending.
- Hemothorax/pneumothorax may require Thoracic Surgery consultation. If a chest tube is NOT indicated the patient would be managed according to the other medical issues. The patient can be otherwise discharged and may follow up either with their PCP or Thoracic Surgery.
- Hemothorax/pneumothorax for which a chest tube is indicated, will be jointly discussed between Thoracic Surgery and Medicine to determine which service should admit the patient. The decision will be based on the number and degree of active medical issues or significant comorbid conditions (including need for additional work up for syncope and social evaluations for discharge planning (ie ground level falls in the elderly).
- Elderly or severely ill patients (≥ 65 y/o) with >2 acute rib fractures (≤ 24 hrs) that have poor pain control in the ED with oral agents should have an ICU consult for admission for regional anesthesia and pulmonary toilet.

Please note that there is no "TRAUMA" service at the VA. The majority of surgeons have no recent experience or expertise in the diagnosis and treatment of traumatic injury. There is also no immediate access to the OR or Interventional Radiology outside of business hours. It may take up to 2 hours to get an OR team in and ready to start a case off hours. These resources must be factored into decision making.