General Surgery Resident Orientation
Palo Alto VA Medical Center

Welcome to the VA! We hope that this will be an excellent learning experience for you.

Offices: Surgical Service is located in Bldg. 100 3rd floor. The site director and person to whom questions should be addressed is Dr. Sherry Wren ext 66598. Computer access will need to be obtained by giving your name and SSN to Hansni Prasad, the program support assistant for General Surgery at ext 65682. Computer training can be arranged by having Hansni contact one of the CPRS trainers. To access the paging system at the VA, dial 65970.

TEACHING CONFERENCES:
8:30 AM Mondays Attending Teaching Round: There is attending teaching rounds every Monday morning after everyone has returned from M&M. The team is expected to present accurate and full information on each patient on the service as well as understanding the disease process of the patients you are presenting. This is a great opportunity for you to learn and discuss patient's care and disease process. Enjoy!
4:30 PM GI/RADIOLOGY/SURGERY CONFERENCE: Cases from the wards and clinics will be discussed with film review. Give names to Nina or Lynne for submission to radiology on Monday AM.

WARD PATIENT CARE:
Patient care is an important learning tool. Understanding the standard clinical course for patients is imperative to acquire the ability to recognize when a complication occurs. Therefore, it is expected that every member of the team should know the basics of EVERY patient on the service, including patients we are actively following as consultants. This includes knowing their admitting diagnosis, surgeries they have had, and where they are in their clinical course. It is also expected that the intern shall read about the diseases of patients on the service so they can better understand their care and to take part in decision making under supervision of the chief resident and attending. The Chief Resident is the team leader and will assign OR and ward patients to each service members. We expect that the interns and advanced practice team members (CNS and PA) should work as a team. Interns should know all of the data regarding their care including daily vitals, I+Os, labs, medications, etc… The interns will be responsible for daily notes, orders and all tasks related to the care of the patients on the service. Our PA and Clinical Nurses can help you with system related issues as well as requesting tests, studies, consults, etc… However, it is expected that the interns have the primary responsibility to ensure that the day-to-day patient care tasks are completed.

Daily Notes and Consult Notes: Notes are to be written daily by an MD team member. It is not sufficient to co-sign a medical student note and independent
not or addendum must be done including PE and assessment must be written. Please make sure that the resident supervision (by the attending) statement is on all notes. “The patient was seen and/or discussed with Dr. ‘Name’ who agrees with action plan.”

Operating Room: OR is a priority and you should be in there as much as possible!! Lynne or Nina will provide the OR schedule for the nest week on Friday. You can find information regarding these patients in the computerized medical records. The Chief Resident will assign OR cases to individuals on the service. The interns have priority in the OR over the PA. If the interns are available, it is expected that they will scrub in on cases even as a second assistant. The PA is the OR assistant when there are no residents available such as on Tuesday mornings during teaching conference or when she is free from other duties.

You should be in the OR at 7:45AM (Except on Core Course Day), no exception, to start the first case. Part of being a good surgeon is to understand every aspect of patient preparation prior to the actual incision. Therefore, if you are scrubbing into a case, you are expected to be involved with all aspects of the case from the time the patient is wheeled into the room. It is also expected that you have seen and introduced yourself to the patient and examined him/her prior to the procedure. Know when the patient is planned for the OR and be there early. Take the time to learn about patient positioning, OR equipment set-up, placement of lights, etc. Be active in positioning the patient, prepping the area, placing foleys, SCDs, electrocautery pads, etc. The best surgeons can do every task that needs to be done in the OR that is being done by the staff. In addition, you should have read about the cases to which you have been assigned. STUDY ANATOMY AND REVIEW TECHNIQUES FOR EACH CASE BEFORE YOU STEP IN THE OR. If you are unfamiliar with the anatomy and the basic steps of the operation you cannot safely do the operation and the case will not be performed by you. Procedure description can be found in surgical atlas such as Zollinger's or Chassin's. In addition, a great deal of practical information can be found in texts like Maingot's Abdominal Operations or Mastery of Surgery. These texts differ from traditional textbooks as they are focused on the finer points of surgical operations including positioning, dissection, choice of instruments, potential pitfalls, etc.

Fellow Coverage of Laparoscopic Cases

When both Chief Resident and MIS Fellow are available, it is the Fellow’s responsibility to cover advanced laparoscopic cases. These include bariatric surgery, lap hernia repairs, lap foregut surgery, robotic cases, and lap colon surgery performed by Dr. Eisenberg. The Chief resident is also asked to scrub in on these cases if they are not doing other surgeries. Laparoscopic colon and solid organ procedures performed by Dr. Wren/Visser will be covered by the Chief Resident. Laparoscopic cholecystectomy, straight-forward laparoscopic ventral/incisional hernia repair and laparoscopic/endoscopic placement of feeding tubes are covered by the Resident and the relevant Teaching Staff.
**Medical Students:** Medical students are here for 2 reasons only: to become great physicians and to learn how general surgery is performed. Students are expected to follow two to three patients/week, write daily progress notes, learn how to draw blood and start IV. You can help them by making sure their progress notes are complete when you **co-sign** the notes. **HAVE THEM SEE ALL NEW PATIENTS**!

**ICU Patients:** Patients are admitted to the General Surgical Service and managed cooperatively with the ICU team. The following are the expected communication points we have agreed with the ICU team:

- **Pre-op:** Surgical team (Chief resident) notifies the ICU team if there is an anticipated complex case or plan.
- **Post-op:** Surgical and ICU teams meet at the bedside with anesthesia and nursing for hand-off. Items to discuss include intra-op course, ongoing hemodynamic or respiratory issues, BP goals, antibiotics, special monitoring needed (i.e., vascular checks, drain output), etc.

**ICU Care:** The ICU team rounds two times daily at 8AM and 3PM. The Chief Resident is expected to discuss the goal, management plan, and disposition with the ICU team/fellow in the morning prior to ICU round (between 7-8AM) and throughout the day as patient conditions change. In the evening, after the 8PM the ICU fellow will touch base with the Chief Resident to review any changes and/or confirm the plan for the night. Please try to make sure you find out the ICU fellow on call so this conversation happens in the evening.

Communication is the key to this successful relationship.

**Clinics:** General Surgery Clinic meets weekly on Thursdays at 8:30am-4pm. Please be prompt and dress professionally (no scrubs in clinic). Everyone is expected in clinic unless there is an emergency, consult or other emergent situation. The primary focus in clinic should be to ensure that patients are being seen expeditiously. If there are a large number of patients waiting to be seen, defer charting until patient volume is less. All patients should be seen with a directed review of the chart to check appropriate notes and tests prior to presenting to the attending. All patients will be seen and discussed with the attending. (each attending is different and may/may not want you to do a clinic note so please ask them).

**Consults:** For the junior residents, the VA is one of the first places where you will have the opportunity of being the first responder in seeing a consult. Use this as an opportunity to learn about disease process and presentation. All consults should be seen expeditiously (within 30 minutes). Do not defer consults by asking for more studies. See the patient first to assess the patient stability and determine if any other tests are needed. Learn to identify when a patient is unstable (tachycardia, hypotension, altered mental status, etc) and expedite your assessment in those patients to get them to appropriate treatment faster. Once the patient is seen, contact your chief resident to present the patient. Have all
pertinent information available at that time. After seeing patients, go back and read about the disease process to better understand presentation, diagnostic testing, and treatment.

Chief Residents must see all consults promptly after the intern/residents have done the initial evaluation. Attending physicians need to be contacted about all consults as early as possible by the Chief Resident to ensure that timely patient care decisions can be made. The attending on the case has to be contacted prior to admitting a patient or prior to ER discharge.

**Consent Procedures:** VA policy must be followed for consents. If a patient is not conserved they can sign a consent form. If they are conserved for medical decision-making or unable to participate in the consent procedure, the attending should be contacted. Separate blood transfusion consent must be signed and witnessed. Emergency consent can be obtained from family member via a telephone (located with script ICU and tape machine). Any ward can make available the entire 15 page consent policy from the computer to clarify any questions. Operative site must be marked with your initials otherwise patient will not be transported to OR. On Tuesday mornings, please be sure you mark the first case patients prior to leaving the VA to go to Grand Round and/or core course. Electronic consent forms should be used and paper consents only in emergencies when computer access is not available. When consent is being obtained for cases such as hernias, cholecystectomy, or lumps and bumps removal, please put all attending names on the consent.

**Morbidity & Mortality Reports:** Chief resident must submit all general surgery complications with Name, last 4 SSN, attending initials, and brief paragraph with details to Dr. Wren. If sending by email you must use your Stanford.edu account and have the words secure: in the subject line to make sure it is encrypted for PHI.

**VA support staff:** Current support staff at the VA consists of two Clinical Nurse Specialists (CNS)s and a PA. The CNS’s serve to coordinate the OR, clinic, and outpatient care. They are excellent resources as to advanced discharge planning resources within the VA and are both wound care specialists. The PA serves as an adjunct for patient care in the hospital and can also perform H/P, consults. OR assist, soft tissue skin excisions, and is in charge of the perianal clinic. Lynne Dempsey, RN, MS (Beeper #11613, Ext. 63398) and Nina Bellatorre, RN, MS (Beeper 11663, Ext. 66127) are the General Surgery Clinical Nurse Specialists. Lynne is the point person for the oncology patients and Nina focuses on breast cancer, morbid obesity, and ostomy care. These nurses are key personnel in assisting with the service, they can be helpful in discharge planning, obtaining tests or procedures, scheduling patients for other clinics and appointments, patient teaching, setting up all equipment needed for discharge, and finding patient information. They have been in the VA a long time and can help you with short cuts. They can order outpatient supplies for wound care and
tube feeding when you communicate that to them but cannot prescribe medications.

Kim Hwa, PA-C (Beeper #21643, Ext. 69934) is the General Surgery PA. Kim can see pre-ops, answer floor calls, and follow up on patient care issues when the interns are busy in the operating room or away at Core Course. As noted above, primary responsibility for day-to-day care of the patient rests with the interns on the service. Kim is a good point person to go to for information on the patients when you are new on the service. Kim can also help you with the work on the service when you are busy. She has other responsibilities including a post operative telehealth and perianal clinic and can perform and teach minor skin and subcutaneous excisions. She is there as a resource for the team and to provide continuity. She will cover the pagers and OR cases when the residents are at Core Course and Grand Rounds.
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

Please note there is no “trauma” service at the VA. The ED physician is expected to do initial workup (including C spine evaluation/clearance) and stabilization of trauma patients and consult specialty surgical services as indicated. Ambulance should not be bringing any fresh trauma with mechanism for injury, those should be sent to a Trauma Center for evaluation. (See trauma sheet for triage, all of these should be sent to Stanford). Patients who walk in or are brought by family members should have workup based on ATLS guidelines. Call general surgery for abdominal injuries. If a patient has isolated rib fractures +/- hemo or pneumothorax please call CT surgery, limb fractures call orthopedics, facial trauma call ENT or plastics, Head trauma call neurosurgery.