

The Burn Unit Medical Student Survival Guide: 4th year (Critical care, AI, Elective)

Where to be (and when to be there):

- Rounds:
 - Mon/Tues/Fri: 7:00am, Wed/Thurs: 6:30am
 - We always start in the burn unit at Rm. 5420
- Conferences:
 - Tues: Burn M&M (12:00, BICU Conf room)
 - Tues: "Team" (includes doctors/nurses/PT/OT/RT/SW/etc @ 2:00 pm, BICU Conf. Room)
 - Wed: Surgery Grand Rounds (7:15am, Old Clinic Auditorium - 4th floor)
 - Burn Lecture – **Required for all students.** (BICU conf room @12:00)
 - Thurs: Nothing
 - Fri: Nothing
- OR/Clinic:
 - OR M-F (Dr. Jones, Dr. Hwang, Dr. Cairns) – usually rm9
 - Clinic T/R/F
- Students are generally not required to come in on the weekends, but many have found that doing so is helpful. Please check with Drs. Ortiz-Pujols and Jones.

***All 4th year AIs must attend these conferences!**

Med Student Responsibilities:

- **Evaluations: Please contact Dr. Jones, early in the rotation, to plan a face-to-face midway and final evaluation of your performance on the rotation.**
- Patients:
 - Generally, MS4s pick up as many ICU pts as you can handle, MS3s pick up 1 – 3 ICU patients
 - Pre-round on your patients each day and be prepared on rounds to offer a plan; write a note each day. (**you shouldn't need to be here more than an hour before rounds)
 - F/u on all aspects of the plan for that day (i.e. look up study or lab results and report back to intern, etc).
 - If your patient is in the OR, you should try to be there too. (**more pertinent for 3rd year students**)
- OR/Clinic:
 - Feel free to go to the OR and to clinic as often as you like if these things interest you. (At least one medical student should probably be in the OR each day... they need your help, and they let you do a lot!)
 - **If you are on critical care, your priority should be the unit. If you are on an AI, your priority should be the OR. If you are on an elective, do whatever you want!**
 - Reminder: Burn surgeries are not technically sterile (except tracheostomies), so you don't have to scrub and the patient may not be draped. You still gown up, so be sure to introduce yourself to the scrub nurse and grab yourself a gown & gloves. Also, most people prefer the shoe covers that go up to your knees (found outside room 9)... burn cases can be quite bloody.
- Updating THE LIST:

- Med students should assist interns to keep the pt list up to date each day. Divide and conquer the following tasks.
 - Cultures (make sure to look at the date the culture was done, not the date the result was reported)
 - **TTR/Alb (also known as prealbumin) each Mon. This should be updated on the list each Monday.**
 - Meds/Abx (check against MARs)
 - Lines & OR/events: If a line has been changed, please note it on the list. If your patient went to the OR or had a study, put it on the list.
 - Don't delete patients from the list – let the residents do that.
- Student Presentations:
 - Each student is expected to give a brief (5-10 min) presentation at some point during the rotation. Feel free to present on anything that interests you!
 - Prepare a 1 page handout or short ppt presentation (**optional**)
- Misc:
 - **Make sure somebody prints lists for rounds each morning (should print about 6 copies)**
 - **OR days: a student should call the blood bank that morning (6-4011) and make sure all pts going to the OR have blood ready**
 - Ask the interns what else you can do. This may include:
 - Calling consults, calling the burn clinic for f/u appts, prepping for central lines (don't do the line without them!), etc

Learning Objectives:

*** This is meant to be a guide, but as a fourth year student you should know what interests you and where you need to improve. Make your time on the burn unit meaningful by focusing on areas that you think will be helpful or would like to learn more about.*

To Learn:

(through reading, discussions on rounds, teaching each other, didactic sessions, etc)

- Types of burns: electrical vs flame vs chemical, 1st vs 2nd vs 3rd
- Treatment of burns (acute resuscitation, OR, wound care)
- Compartment syndrome
- Inhalation injury and ARDS
- Causes of fever in the ICU
- Infection/antibiotic use
- Analgesia & sedation in the ICU
- Nutrition
- Normal physiology (especially respiratory, cardiac, and renal)
- Fluids/electrolytes (fluid resuscitation in an acute burn (Parkland formula), reasons for choosing a certain fluid, crystalloid vs colloid, significance of electrolyte disturbances, how to replace electrolytes)
- Acid/Base (understand how to interpret an ABG, and how it relates to ventilator management)
- Burn shock
- Acute renal failure
- Causes of coagulopathy and anemia in the ICU
- Ventilator management
- Use of pressors

To See:

- Intubation

- Percutaneous tracheostomy
- Escharotomy/fasciotomy
- Chest tube placement
- First, second and third degree burns (know how to identify each, and how to estimate TBSA involved)
- OR: burn excision/wound debridement, harvesting donor site, STSG to burn site

To Do:

- Learn how to make concise and comprehensive presentations on rounds
- Learn how to write clear and thorough notes in the chart
- Short presentation on a topic of your choice
- Change over wire (COW)
- Place a new central line (4th year)
- Place an a-line (4th year)
- Bronchoscopy
- OR: hemostasis of burn excision site, mesh skin, allograft to donor site, apply dressings (Acticoat, burn dressings, etc)

Learn about the roles of the other members of the team...

- Nursing, Respiratory therapy, PT, OT, Rec therapy, SW, chaplain

Good Resources:

- THE "MEDICAL STUDENT RESOURCES" DATABASE:
 - This is a work in progress, but as more students cycle through the rotation, more and more information can be found here. Students will save their presentations here. Also, feel free to save helpful articles or other resources that you come across during your time on the burn unit.
- Drs. Cairns, Jones, Hwang, and Meyer (Burn Attendings):
- Drs. Ortiz-Pujols (teaching fellow), Carter and Short (Clinical Fellows):
 - The attendings and fellow really know their stuff, and they are always willing to teach (time permitting). If you have a topic you'd like to learn more about, ask them if they could schedule a time to give a lecture or have a discussion. The attendings also frequently do informal teaching sessions on rounds.
- Ancillary staff:
 - Nurses know a ton about wound care, pain management, labs/vital signs, etc. They also know where things are!
 - Respiratory therapists can help you understand respiratory physiology, vent settings, trach collar trials, and how to practically interpret ABGs.
 - PT/OT will answer your questions about the patient's functional status and physical conditioning. (OT primarily works with the hands, PT will walk patients who can walk, and stretch patients who are sedated.)
 - SW and the Chaplain can help you with discharge planning and understanding complex family/home situations.
 - Anita Fields is the Burn Care Coordinator. She has been here for over 20 years and is a great resource for questions about burn patients and the Burn Center.
- Online resources:
 - PubMed articles are probably your best bet for burn-specific questions, since burn patients have unique pathophysiology and problems. Other useful resources include UpToDate, online textbooks, etc.
- Books:

- Most surgery text and review books generally have a limited section on burns. Surgical Recall and First Aid are good for the basics. There are also a few larger surgical and critical care textbooks in the storage room by the computer.
- Each other!: Don't forget to ask your fellow classmates. Fourth years who were on the burn unit as third years are especially helpful!

Helpful Hints: from those who have come before....

- It can be helpful to write your note while you pre-round in the morning (you can even skeletonize it the night before). You can then add/change the plans during rounds. This enables you to give a more organized presentation.
- Look at your patient's x-rays, don't just call RTAZ. If you need help, ask one of the residents (if they are not too frantic before rounds).
- If you want to see or help with a procedure, you have to ask (nicely).