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The Burn Unit Medical Student Survival Guide: 3rd year Surgery Clerkship

Where to be (and when to be there):

- First Day: Page Dr. Jones at 216-3183 He will meet with you to orient you to the service. Please check in with Dr. Jones, or Dr. Ortiz-Pujols, so he/she can aid in your educational activities while on the service.
- Rounds:
 - o Mon/Tues/Thurs/Fri: 7:00 AM Wed: 6:30 AM
 - We always start in the burn unit at Rm. 5420
 - You shouldn't need to arrive more than 1h before rounds begin
- Conferences:
 - Tues: "Team" (includes doctors/nurses/PT/OT/RT/SW/etc @ 2:00 pm, Burn Center Conf. Room)
 - Tues: Burn M&M (12:00 1:00pm, BICU conf room)
 - Wed: Surgery Grand Rounds (7:15am, Old Clinic Auditorium (4th floor)) and M&M at 5:00pm in the OR Classroom. Please note that rounds begin at 6:30, not 7:00AM on Wednesdays
 - Wed: Noon Burn Lecture in BICU conf rm (subject to change)
 - o Fri: Nothing!
- OR/Clinic:
 - o OR M/W/F (Dr. Jones, Dr. Hwang, Dr. Cairns) –usually rm9
 - Clinic is held every day can find the schedule for the clinics at https://www.med.unc.edu/surclerk/schedules/burn
- Don't forget to...
 - Go to all lectures (leave rounds early if necessary)
 - Go to tutor group
 - Study for the shelf! (On afternoons when all tasks have been done, it's ok to leave before 5 to study – when in doubt if something needs to be done, ask the chief and/or the interns).
- Students are not required to take call or come in on the weekends, but check with Dr. Jones or Dr. Ortiz-Pujols, to be sure.
- **Note**: Weekends, while not at all required, are less busy, and may be a great opportunity for additional learning/procedure opportunities for those who desire.

Med Student Responsibilities:

- Patients:
 - \circ Generally, MS4s pick up 2 ICU pts, MS3s pick up 1 2 pts (you are welcome to take an ICU pt if you are feeling ambitious!).
 - Pre-round on your patients each day and be prepared on rounds to offer a plan;
 write a note each day.
 - F/u on all aspects of the plan for that day (ie look up study or lab results and report back to intern, etc).
 - o If your patient is in the OR, you should be there too.
- OR/Clinic:
 - You should try to go to the OR and to clinic as much as possible.
 - 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:

Please help interns to update the list. Updating the list should not be solely the responsibility of students.

- 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 (aka prealbumin)/Alb should be updated on the list each Mon
 - Meds/Abx (check against MARs)
 - Lines & OR/event: If a line was changed, please note it on the list. If a
 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.

Misc:

- Make sure somebody prints lists for rounds each morning (should print about 10 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
- You are responsible to present a 5-7 min, formal oral presentation, to Dr. Jones before the end of your rotation. This presentation is not replaced by presentations that may be assigned by other attendings.

**F.Y.I. - For bold and italicized tasks, one student should be assigned to the task for that week (decreases confusion on whether task is done).

Learning Objectives:

** As a third year, you are still learning how to be a medical student, so don't get overwhelmed with trying to learn how to wean a ventilator! The following is a rough guide... don't sweat it if you don't have the chance to put in a central line or discuss ARDS. Stay focused on the big picture, and try to understand the physiology behind your patients' hospital course. If you don't understand, ASK! Your #1 Priority is your Education. 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. Consider making a list of items you would like to learn to ensure they all happen prior to the end of your rotation. Responsibilities, opportunities, and team dynamics will vary with each individual experience, so be proactive about achieving your goals. If you should feel at any point as though you are being kept from meeting these goals, don't hesitate to talk with Dr. Cairns – sooner rather than later - he is highly invested in your education and will make every effort to improve the situation (i.e. too much time doing paperwork, lack of adequate division of procedures, conflicting information on responsibilities).

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)
- 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
- Bronchoscopy
- 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 an a-line
- 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, pharmacy, 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 (mostly 4th years) 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:
 - The attendings 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.
- Clinical Fellows Dr. Jeff Carter and Dr. Tracee Short
- Dr. Shiara Ortiz-Pujols Teaching fellow
- 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 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. (Note: burns are low yield on the shelf.) 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. If there are fourth years on the rotation, they can also be a great help for "how the hospital works" type questions (ie "what is the phone number for RTAZ?" or "how do I fill out a green sheet?").

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

- 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).
- **BE PROACTIVE!** If you want to see or help with a procedure, you have to ask (nicely).
- Be sure to hold tube feeds and suction residual in tubing prior to placing pt in trendelenberg for a procedure. (Nurses can show you how to do this).

About the "Survival Guide:"

This was created by med students to help orient students on future rotations. Please feel free to edit and update as you see fit.... (It's saved in the "Medical Student Resources" folder on the desktop.)