DES MOINES AREA MEDICAL EDUCATION CONSORTIUM, INC.

UNIVERSITY OF IOWA CARVER COLLEGE OF MEDICINE
Branch Campus

Surgery Clerkship Survival Guide: Des Moines

Overview

You will be assigned to two different surgery teams for 3-week blocks. Possibilities include: Surgical Oncology, Vascular Surgery, or Colorectal Surgery team at IMMC.

The OR

1. Once you get to the OR: Most of the nurses and scrub techs are really nice! But of course, there will be some who aren't. My best advice is to develop thick skin as quickly as possible and to do as your told, even if it isn't necessarily the way you were taught. Some nurses like you to do things their way and it is a learning process as to how each OR team functions. Regardless, the best things to do are:
    - Make sure you go to the correct OR (check the screens right at the main desk Level A).
        - Introduce yourself to the scrub nurse, the scrub tech, (the anesthesiologist- sometimes they let you intubate/other cool procedures).
        - Write your name and your residents name on the board behind the door.
        - Grab your and the residents' gown and gloves so everything is ready to go (list of glove sizes of the residents is in each OR on one of the cabinet doors or by the phone).
        - Offer to open your gloves and gown for the scrub nurse. Ask them if you can help.
        - Grab a step and let the scrub nurse know you are going to position it by the bed so once the surgery starts you won't have to ask anyone to grab it for you (you just kind of kick it around to reposition it).
    - Pre-scrub so when the time comes to actually scrub you can just use the gel, go in ahead of the surgeon and resident while they scrub, and get your gloves and gown on. This helps the scrub tech be ready to go when the surgeon is ready to go instead of everyone waiting for you to get scrubbed in afterwards.
        - A good rule of thumb is to scrub in whenever the resident goes to scrub; you can also try to scrub just before and be ready to go by the time the patient is being draped so the scrub nurse doesn't have to tend to the surgeon and you.
    - If the resident needs to shave parts of the patient, you can help by wearing the sticky mitts. Put the SCD's on the patient's legs and float their heel.
    - Just make sure you are asking how you can help and aren't sitting there on your phone/studying without offering to help first. You go over most of this stuff during the orientation especially the part with your scrub training nurse – don't be afraid to ask questions!

- Typically, your residents will have you help with room turnover between cases and text them when the patient has arrived so that they can be putting in orders or checking in with the rest of them team between cases. Some residents will have you go to PACU with them, but most find it more helpful for you to stay in the room. Once the room is cleaned you may have time to read Pestana's or do Amboss Qbank questions.

2. During surgery, try to be helpful but remember being helpful can also mean staying out of the way if you're not sure about things or if you need to watch how the flow works the first couple of times before stepping in to help.
    - Put the light covers on
    - Help organize the wires/make sure none of the instruments fall to the floor in that first minute-bustle.
    - Whenever you see resident's or surgeon's suturing, grab the suture scissors. You will become very familiar with these and the retractors. For pro tips on how to cut suture/hold suture scissors etc. again, check out Surgical recall or a similar source.
    - By "grab the suture scissors" I mean ASK the scrub nurse if you can get the suture scissors from their tray. Unless they say that you don't need to keep asking before you touch their tray- keep asking. NEVER TOUCH THE TRAY WITHOUT PERMISSION.
    - Follow the lead of your resident. Usually, they will try to help you/tell you what you can do/where to stand etc.
    - Ask your residents good topics to study prior to cases you see on the schedule.
    - With time, you'll get a feel for moments that are appropriate to ask questions and when the situation is too tense/busy.

Prep for OR Cases

Obviously, this is attending and resident dependent like anything else, but you should prepare as if you will be "pimped" (asked a lot of questions). In general, know who the patient is (learning how to look up your surgeon's surgery and clinic schedules are key so you can plan ahead!), why they are getting surgery, if they had other options, why surgery was indicated, etiology, pathophys, treatment, prognosis of their disease. Try to review important anatomy for the surgery. Surgical recall and Medscape are two great resources to prep for this in the most time efficient manner (along with the anatomy resource of your choice- Netter's. Wiki.). Another great resource to use in prepping for OR cases is one of the textbooks available for free in the Hardin Electronic Medical Library titled current Diagnosis and Treatment: Surgery (15th edition). Reviewing the attendings note is always a good idea (can sometimes be difficult to find; it is typically a scanned in document since the Iowa Clinic has a different EMR system).

-Surg/Onc Service Specifics: Know your patient including how they were diagnosed, what stage cancer they have, and what role chemo/radiation/sentinel nodes might play in their care. Also

review relevant anatomy. Recommended resource: NCCN guidelines (website of phone app), great for prepping for questions.

-Vascular Service Specifics: In general, this group of attendings will not pimp you very much but your senior resident may fill this role. Know the indications for surgery, vascular disease risk factors, and of course, your vascular anatomy. For endovascular surgery (e.g., AAA repair, carotid stenting) you will probably not scrub in. You can still help transfer the patient and prepare the residents for the case but bring some study material to these cases if you are not excused by your resident. In any case when you're not scrubbed in, offer to take your resident's pager and return pages for them. Recommended resource: Gore medical endovascular surgery combat manual, has succinct info on almost every vascular procedure you'll see https://www.goremedical.com/resource/AQ0624-EN2

-Colorectal Service Specifics: This service typically is very laid back as well. Any pimping you receive is usually related to anatomy. If you can avoid working the robotics cases, do so. You will not scrub in and they last for many, many hours. Going to endovascular cases (e.g., colonoscopies) is optional; you can use that time to study instead. Dr. Rogers has been known to throw students out of the room- not because you did anything wrong but because he becomes stressed out and doesn't like an audience. If this happens, embrace the break and go grab food, sit down, read, etc.

You will not know everything. That's okay. You're not expected to know everything. You are expected to try, to show interest, and to help out. There are great attendings/residents on every rotation and sometimes a few not-so-great ones- surgery is no different. Just remember if someone crosses the line-Dr. Cheyne always has your back and don't put up with it. If someone is just acting out under the pressure or simply has a personality problem just keep reminding yourself that it's not you- they are probably just being a jerk. Do not beat yourself up for things you didn't do because that will be unsustainable to get through the clerkship.

Pre-Rounding / Working with Residents

1. Especially if you haven't already had peds or internal med then making sure you leave yourself enough time to properly pre-round / chart round on your patients (1-3) will make life easier at the beginning of your rotation.
    - Use the example of the format for presentations that the surgery resident goes over with you during orientation. Ask your residents on the first day for specifics on how they prefer your presentations. Surgical Recall in general is a GREAT resource to look through before/in the beginning of your rotation. It has great examples of pimp questions but also teaches you about rounding, presenting, important stuff to know in the OR. Highly recommend if you feel really lost.

- On the first day you will likely shadow your residents so make sure to pay attention to what they like to ask patients and ask them how to check chest tubes/anything else you're confused about.
- Know things like if the patient has a catheter and why, if the patient is on O2, at-home meds (especially baseline O2 use or at home warfarin dose). These can also be good topics to bring up in the plan. (should you remove the catheter, can you titrate the O2 to their baseline, how are you going to transition the patient to anticoagulation at home/do they need to be sent home with different meds).
- Get your residents' numbers on the first day! Make sure to double check what time you are rounding with them (usually between 5-6 AM). It may change day to day, and you are expected to keep track of that.
- On the first day of a new service, ask your residents what supplies you can stuff into your white coat pockets to help out. Also ask for the codes to the supply rooms on each floor so you can restock and grab supplies in a pinch while rounding.
    a. N6: 315
    b. N5: 251
    c. N3: 2 and 4 simultaneously followed by 3
    d. Vascular: make sure there is a doppler in the room. Ask nursing staff if you can't find any on the unit
    e. Colorectal, vascular: have plenty of dressing supplies on hand (ACE wrap, Kerlix rolls, gauze, etc.). You can put these in the room while pre-rounding so you don't have to hold so many things in your white coat pockets.

2. Trying to help your residents will lead to better evaluations, more time for them to teach you, and perks like them remembering to let you leave early if the schedule allows. Ways you can help include getting to the OR early and texting them when the patient arrives (so they can work on notes/orders instead of being stuck waiting in the OR) and offering to go check on a patient/talking to the nurses when they get paged.

Resources and Studying for the Shelf Exam

1. Remember to study for the exam! Yes, you only need a NBME exam score of 55 to pass but… you need a 55 to pass! Many questions are very "internal med-esque" in terms of make the diagnosis questions or what is the next best step questions. No anatomy or specifics on surgery procedure steps/techniques. Thus, studying for pimp questions during clinic and the OR will most times not be very high yield for the exam. Sometimes, but often no. So, don't forget to balance the two. It's OKAY to miss a whole day of pimp questions. Again- just as long as you're interested in learning and sometimes get a few pimp questions right. Try to balance it.
    a. First and foremost, before you start the rotation read this great 1 pager about the shelf exam: https://www.medschooltutors.com/blog/know-thy-shelf-surgery-edition
    b. The general rule is to choose 1-3 resources and stick with them for the exam. Unfortunately, there is not a great consensus on a "best" resource for this exam.

Q banks include:

1. UWorld surgery questions AND internal med sections related to surgery exam topics such as GI and nutrition. This is probably the single most valuable resource for the exam.
2. Online Med-Ed: cheaper than buying UWorld, and some people prefer how it covers more of the topics generally than sifting through IM questions related to surgery on UWorld.
3. AMBOSS surgery questions. AMBOSS is typically more difficult than the actual NBME exams for all rotations in general. Do not be discouraged when doing these questions! There is an app as well so when you find yourself with downtime (particularly in the OR), you can be doing questions!

c. High yield quick-reference style resources:
   1. Pestana's - highly recommended and a copy is provided. I recommend reading it before the test – it's a very quick read! Fits in your scrubs back pocket, so take with you to the OR so you can read between cases.
   2. Case Files for Surgery
   3. Online Med-Ed videos!! Free, to the point, high yield. Ample dry humor.
   4. Surgical Recall: best for pre-clerkship and OR prep
d. Good textbook references:
   1. Surgery: A Case-Based Clinical Review- provided to you. Can be helpful for case prepping for the OR as well as studying for exam. Questions at the end are helpful (but there are a lot of them).
   2. Step-Up to Medicine, IM Essentials – can be helpful because there is a decent amount of IM stuff on the shelf exam
e. Pick an anatomy resource to reference throughout the clerkship: Netter's, Radiopedia, UpToDate or other databases, etc.
f. Recommended podcast (if you prefer to listen to information): Surgery 101. Note that the authors are Canadian, so the guidelines aren't a perfect match with the US, but it has good info on physiology.

Bottom Line: You Can Do It!!! 😊

The surgery rotation can be intimidating and taxing but, it is doable. Regardless of whether you want to go into surgery or not, you will leave your 6 weeks tired but a much better medical student than when you started. Most people enjoy this rotation more than they anticipated!