## Sorry, you’re doing a spine tomorrow!

**Drugs**

* Midazolam x 1
* Sufentanil 250 mcg x 1: 250 mcg in 250 mL NS
* +/- Fentanyl x 1
* Albumin x 2
* 100-mL vials of Propofol x 4
* You will receive the tranexamic acid once you get in the room from the circulator nurse
  + Give the bolus at the rate written on the bag before incision
  + Then start the infusion at the rate written on the bag at incision
* Induction with Sufentanil, Lidocaine, Propofol, and Succinylcholine (no non-depolarizing NMBs if you’re doing MEPs because they’ll want to get baseline MEPs ASAP)

**Set-up**

* Brain + 4 pumps
* Pump tubing x 4
  + Propofol gtt, phenylephrine gtt, sufentanil gtt, tranexamic acid
  + You can mix up the Sufentanil and spike it but you have to carry it with you because it’s a narcotic
* 3-lead extension set + green microtubing
* Arterial line set-up + cable
* Hot line + extension
* Second PIV set-up with hep lock
* BIS monitor
* OGT
* Humivent
* Accordion connector
* Tegaderm for eyes + eye lube
* Oral airway, tongue blade, ETT, laryngoscope
* Special bite block if doing MEPs
* Temperature probe
* +/- video laryngoscope

**Pre-op**

* +/- Type and screen or cross
* Document baseline neuro exam on brown sheet
* Does the patient have any symptoms/pain with neck movement?
* +/- Arterial line pre-op

**Intra-op** (for prone cases)

* You will be going to sleep on the stretcher so get it as close to the machine as you can
* Put your monitors on: put EKG pads on the patient’s flanks because they will be prone and if you put them anywhere on the back, it will be in the way
* Connect your arterial line cable, tape the transducer to the top of the patient’s shoulder (not the patient’s chest because you won’t be able to get to it once you flip prone), and zero your line
* You are ready for induction, do your thing!
* Once the ETT is in the right place, secure it with tape +/- tube tie (unless it’s a cervical spine case)
  + During this set-up period of the case, it is usually ok to run Desflurane until after the flip but always check with the surgeon and monitoring staff
  + You want to hook up your infusions at this point (less tangle if you connect all 3 infusions to the 3-lead extension set and then to the green microtubing to get more leeway. Start your Sufentanil
* At this point, depending on your staff, he/she might take over the face so you can get your lines (arterial line if it’s not in, and second PIV)
* Lube up the eyeballs and tape them with tegaderm
* Put in the OGT and connect to suction and put in the temperature probe
* Stick the BIS monitor on (you don’t have to connect until after you flip)
* Put in the bite block (don’t forget the special bite block if you’re monitoring MEPs) – I recommend taping the bite blocks in so they don’t fall out when you flip
* For the second PIV, if the arms are not tucked, I like to put a hep lock so you don’t have to connect your hot line until after you flip to decrease possible tangle
* If the arms are going to be wrapped in the egg crate, you have to get all your lines connected including your drips, before the flip 🡪 always make sure all of your IV’s run and your arterial line waveform is still good when they’re done wrapping, before flipping
* Start your tranexamic acid bolus because it needs to be in before incision
* Start your antibiotic
* Ready to Flip!

**Pre-flip checklist**

* The surgeon will be here to assist at this point and make sure that the patient is positioned to his liking (they’re very particular!)
* The only IV lines connected should be the PIV placed by the Day Surgery nurse and the green microtubing that is carrying your infusions
* Always keep your arterial line and pulse oximeter connected
* Depending on your staff, you can disconnect the EKG wires from the EKG box to minimize tangle
* Disconnect the NIBP cable, you have an arterial line
* Your temperature probe and BIS should not be connected (they’re not essential at this point)
* Disconnect the OGT from suction and connect it to itself VERY tightly or it will leak everywhere during the flip
* Disconnect the ETT and place the white prone pillow on the patient’s face: the only things going through the hole should be the ETT and OGT
  + The BIS monitor and temp probe will be coming out between the face and prone pillow from the side of the patient’s face
* Reconnect the ETT to the circuit while everyone gets ready
* Is the Foley on the bed?
* Check one last time that all your lines and cables are clear…
* Ready…set…disconnect ETT…flip!
* Naturally, before doing that, you would have made sure that the patient is deep enough so he doesn’t cough and buck during the flip

**Post-flip**

* Hopefully, your lines and cables are not completely tangled at this point
* Connect your ETT to the circuit, make sure you still have ETCO2 and auscultate bilaterally for equal breath sounds
* Connect your OGT back to suction, place it on low-continuous suction…did it leak everywhere?
* Reconnect your EKG wires to the EKG box and your NIBP
* Connect your BIS monitor and your temperature cable
* Connect your hot line to the second PIV that is hep locked
* Untape the arterial line transducer from the patient’s shoulder and tape it on the top of the bedframe at the appropriate level, so that every time the surgeon asks you to raise or lower the bed, you don’t have to keep moving the transducer
  + Don’t lose the remote, you will be raising and lowering the bed a lot
* Now you need to make sure that the face looks good: I like to get under the bed and directly look at the face but I’m sure you could just use the mirror so that you don’t get dirty
  + You want to make sure that the eyes are clear, the bite block is still in, and there is nothing putting pressure on the face
* Once everything is all good and pretty, turn on your propofol gtt if it’s not already on, and turn off the desflurane once you have an appropriate level of propofol on
* Titrate your Sufentanil to heart rate, Propofol to BIS, and Phenylephrine to MAP
  + Don’t forget to keep the MAP at least 70-80s to maintain perfusion to the eyeballs
  + Limit your IVF throughout the case so that the patient doesn’t get all edematous and squeezes his eyeballs out since he’s laying on his face
* The circulator is usually good at putting a lower Bair Hugger on and hooking it up before drapes come up
* Start your tranexamic acid infusion at incision
* The surgeon might ask for some Rocuronium to help with exposure, don’t give too much if you’re monitoring MEPs (20-30 mg usually does the trick)
* Make sure you have some lead with thyroid shield so you don’t get irradiated
* Get a blanket, it’s going to get cold in there!
* Oh and don’t forget to check the Foley, it’s at the end of the bed
* Settle in, you’re not going anywhere anytime soon

**Emergence**

* Review “GWL Guidelines for Anesthesia for Spinal Surgery with Evoked Potential Monitoring”. Basically, turn off Sufentanil gtt about one hour before the end of surgery or the patient will never start breathing spontaneously (the surgeon is usually good at telling you or you can ask the circulator if you’re clueless)
* Once final MEPs are done and good (you’ll hear the monitoring staff and surgeon talk about that), turn on Desflurane, increase your flows, and once you have an adequate level on, turn off your Propofol gtt
* Wake up like you always do, just remember you’re prone