



RN Orientation Manual - 2024

Bedside Care of an Open-Heart Surgery Patient: A General Overview

What is my role and what are the roles of my co-workers?

**Primary Nurse

- Direct anesthesia or RN to put pumps on your side of the bed, or close
- Hook up swan cables
- Receive report from anesthesia (make sure you hear key pieces of information...were their paralytics reversed, Abx given, antiemetic, labs, etc.)
- Enter vital signs and listen to heart/lung sounds

**Charge Nurse

- Opposite side of bed as primary nurse next to ventilator
- Passes suction tubing to RN for chest tubes
- Attaches brick to monitor
- Hooks up PA/CVP and zeroes lines
- Assists with untangling IV tubing and cables

**Helper (3rd RN)

- Empty catheter and mark chest tube outputs; write down all 3 values for primary nurse
- Assist in attaching chest tubes, if not already done
- Draw blood from A-line for lab, then check a blood sugar; Give value to primary nurse
- Check blood products if needed
- Secure pacer wires
- Ask primary and/or charge nurse if further help is needed untangling lines, re-taping ETT, or inserting OG tube

**RT

- Attaches vent to ETT
- Receives settings from Anesthesia
- Obtain baseline ABG if necessary
- Re-tape ETT

The key to life is: **ADEQUATE TISSUE PERFUSION**

- Rate
- Rhythm
- Preload
- Afterload
- Contractility

Everyone's gone...what happens now?

- Continue to enter vital signs with swan numbers Q 15 min x4 and decrease to every hour if stable
- ABG at 15-30 minutes after arrival
- Chart rhythm strips to include ECG in two different leads, PA waveform, CVP
- Monitor CT output Q 15 min x 4-8, Q 30 x 4, then Q1
 - o Call for bleeding more than 200mL/hr. If you know you are going to reach this limit, call early instead of waiting until the hour mark
- Check and see if lab results are back, replace K+ and Mg++ per protocol; Check H&H and PLTs



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- If Coags were ordered post-op, don't forget to keep checking for them as they take longer to result
- Complete a head to toe assessment within 30-45 min and chart; Things move fast and you may not get another chance
- Let family members come back for a brief visit, then let them go. Explain to them that you will be busy weaning medications and a quiet environment is necessary
- Start weaning sedation if VSS and no signs/symptoms of bleeding
- When things are starting to calm down, start capping off all peripheral IVs not in use
- Central line dressing change to subclavian line can also be completed
- Once your patient is awake and VSS, you should bathe your patient or at least remove the betadine from the lower abdomen and groin area (This is really important; especially for men)
- Follow weaning/extubation protocol per orders

On No! Something is wrong

**Bleeding

- Chest tube combines greater than 200 mL/hr
- Call provider and usually receive orders for labs, blood products, and/or coagulation cocktail
- This is a great time to ask for help and keep charge nurse updated

**Re-op

- There are a lot of people involved, don't feel like you are alone or that you did something wrong; it happens!
- Primary nurse:
 - o Tell charge nurse immediately
 - o Your physical position in all of this is by the computer next to the IV pole
 - o You'll need to wear mask, hat, and gloves
 - o Get orders from provider for: Vecuronium, Versed, Fentanyl/Morphine, and antibiotics; check with provider if they want different paralytics/sedatives/analgesics
 - o Make sure you have an open IV line that you can get to easily (and not interrupt sterile field)
 - o Get pacemaker and place it where you can control it, if needed
 - o Continue to enter vital signs and swan numbers in computer
 - o Titrate gtts to hemodynamic parameters
 - o Communicate with MD if:
 - CI significantly decreased
 - BP high/low despite titration
 - They can usually see any lethal arrhythmias, so pause first before saying "he/she is in V-Tach"
 - Make sure your orders are complete for all meds used during procedure

**Cardiac Cath Lab Visit

- On occasion, your fresh heart might have to go to CCL – Why?
 - o Acute ST changes on arrival to ICU (Important to confirm this in report)
 - o Acute changes anytime post-op
- Your role doesn't change as primary RN
- You'll go to CCL with your patient
- Continue to monitor chest tube output (You'll need suction set-up)
- Titrate gtts to maintain hemodynamic parameters



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****Cardiac Tamponade**

- This results from the accumulation of blood or fluid in the pericardial space, impairing ventricular diastolic filling, which eventually causes equalization of all cardiac chamber pressures
- Major factor in development of tamponade is the rapidity with which fluid accumulates in the pericardial space
- Signs and symptoms include: hypotension, low CO/CI, elevation and equalization of diastolic filling pressures, decrease in chest tube drainage (usually occluded mediastinal chest tube), muffled or distant heart tones
- Immediate recognition of this situation is imperative to ensure proper treatment, most often re-exploration

****Not moving one side**

- Stroke is thought to be related to the duration of the cardiopulmonary bypass, aortic arch disease, or sudden blood pressure changes during the post-op period
- If your patient has not woken up or after waking can't move all extremities, CALL THE SURGEON
- This is important in any phase of care, not just immediately after surgery
- Chances are you'll be headed to CT scan
- Don't forget to perform NIHSS, or ask charge nurse to
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So I have to call the Dr...What do they want to know?

- Don't assume they'll be around at shift change
- Inform your charge nurse that you're calling and why; Let the unit know as well in case anyone else needs to talk to them
 - o The exception is an emergency
- Have all of your data!! Hemodynamics, gtts, labs, I's and O's
- State why you are calling: BP, pain, UO, rhythm change, bleeding
 - o Use facts, not your opinion (unless they ask)
- Be confident about your care

Post Extubation – More work to do!

- Patients should be up within one hour
- Start incentive spirometer every hour (ASAP)
- Bathe patient if not completed prior to extubation
- reposition patient every 2 hours, even if they don't want to (helps to drain chest tubes)
- Remove all gtts from pumps that are no longer in use
- Organize lines and pumps for next phase
- Remove any equipment that is no longer needed or anticipated (this really helps the transfer to CSDU go smoothly)
- Secure pacer to IV pole, not in the bed with the patient
- Patient daily weight