

This is for your learning for exams and clinical. For the HESI Skills listed utilize the LMS HESI calendar & HESI Across the Module sheet. Study guide answers will be released on LMS before Muddy Waters #2.

For questions contact Ms. Kilpatrick

HESI Skills: Critical Care Collection

- Arterial Catheter Insertion (assisting) Care, and Removal - review the extended sheet and take the quiz

HESI Skills Respiratory Collection

- Arterial Catheter Blood Sampling - review the extended sheet and take the quiz

<https://youtu.be/cw-NLUmHTv4> Arterial Line Removal Nursing Lecture (2016) live demonstration of arterial line removal on actual patient

<https://www.youtube.com/watch?v=9YzmimDY15s> Safe Set System from ICUmed 2012

Optional Videos

<https://youtu.be/zfQf-KK5mCc> Arterial Lines (Guide for Nursing Students by K. Sun, Army of Nurses (2015) (25.3 min) Explanations and visuals are good and easy to follow

<https://youtu.be/aJmQepDWWqW> Transducers in Invasive Pressure Monitoring (2016) (8.41 min) Basics of how a transducer works & why being level with phlebostatic axis is important. See video at 4.20 minutes. **Note:** Heparin is not used with NS for adult patients

<https://youtu.be/1naup00IZOQ> Arterial Line Management & Nursing Care (2017) Mometrix.com (7.5 minute) Good illustrations & explanations

1. How many mmHg should the pressure bag be maintained?

300 mm Hg

2. List two reasons a patient would need an arterial line.

- a. For someone who needs their blood pressure continuously monitored real time in an intensive care situation
- b. For obtaining serial blood gas levels and other lab specimens – this is due to not having to keep re-sticking the patient and easier access to drawing blood – it most accurately reflects a patient's hemodynamic status

3. What neurovascular and peripheral vascular assessments should be performed on a patient with an arterial line.

- a. On the affected extremity assess the color, temp, capillary refill, and motor and sensory function (compared with the contralateral extremity)
- b. Assess the circulation distal to where the art line is going to be inserted by pulse ox, doppler flow study, or mod allen test
- c. Always assess for overdamped wave form

4. What medications can be given through an arterial line?

- No medications can be administered through an arterial line except Heparin to assure patency

5. What is the phlebostatic access and how does it relate to the arterial line transducer?

- a. The anatomical point that corresponds to the right atrium for the most accurately patient hemodynamic status
- b. Its located at the fourth intercostal space at the mid-anterior-posterior diameter of the chest wall
- c. If it is not positioned at the phlebostatic access than it is most common cause of an over damped waveform which causes an abnormal blood pressure reading

6. List three things to assess and document for arterial line removal

- Assess and document what current medications the patient is on that could affect coagulation and their current lab levels that could increase bleeding
- assess the access site for infection, redness, thrombus, bleeding, and also the circulatory status of the distal areas after cath removal – document all current findings and changes each time its assessed
- assess for elevated temp or white blood cell count that could indicate infection
- assess, treat, and reassess pain – document each pain level and what intervention was done
- make sure the line is zeroed out before the line is removed or before any procedure is done and assess the reaction to it