

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

Krishia Hernandez IM7

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

300 mmHg

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

Patients experiencing hemodynamic instability such as acute hypotension, and hypertensive crisis; cardiac arrest, or shock

Patients requiring continuous infusion of vasoactive medications or frequent arterial blood gas measurements – example: critically ill patients, requiring ventilator support

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

Color, temperature, capillary refill, motor and sensory function – comparing the contralateral extremity

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

Vasoactive medications, heparin

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

Phlebostatic access - a point located by drawing an imaginary line from the fourth intercostal space at the sternum and finding its intersection with an imaginary line drawn down the center of the chest below the axillae

It relates to the arterial line transducer because of the position – if the transducer is not positioned in the phlebostatic access, it can cause an overdamped waveform that results in a falsely low systolic pressure and a falsely high diastolic pressure. Repositioning the patient or raising or lowering the bed can change the position of the transducer.

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

Peripheral vascular and neurovascular assessment

Frequent assessment of the site to see if there's a hematoma formation and the closure of the site

Date and time of arterial catheter removal