

## Objective Questions Week 4

MA 119 Lab 2

Rieland Hamilton

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1. Describe how to remove serum from a clot tube.

You properly and carefully remove serum from a clot tube by running the tube through the centrifuge. This allows the thixotropic gel to make a barrier between the clot and the serum. Then the serum can be decanted and placed in the centrifuge in another tube, using a pipette and carefully removing the serum into its own container and labeled with the patient's information ( name, date of birth), the time the sample was obtained, the amount of sample in the container, the person collecting the sample and the date.

2. Why should you wipe away the first drop of blood when performing a capillary puncture?

You should wipe away the first drop because of skin cells being in the first drop making the test you are performing inaccurate.

3. Capillary punctures are also done for point-of-care testing. Give an example of two POC tests that use capillary samples.

Examples of point of care testing would be obtaining a patient's glucose or a PT INR. Both tests do not require the patient to have a venipuncture performed, instead they require a drop of blood, and this is when you would perform a capillary puncture on the patient.

4. Infant heel stick samples are used for newborn screening tests known as a(n).

Heel sticks on a newborn are known as the blood tests for newborns. The blood tests they run with the heel stick they collected for the newborn are for metabolic disorders and is usually performed within 48 hours after the baby has been born.

5. List the four most common problems that occur with a venipuncture.

The four most common problems that occur with venipunctures are the formation of a hematoma, nerve damage, syncope or fainting and hemoconcentration (due to the tourniquet being on for too long).

6. Why is blind probing NOT recommended as a phlebotomy technique?

Blind probing is not recommended because of the damage and discomfort it causes the patient. This could cause nerves damage, hematoma formation, or vein damage. This also makes a bad experience with the patient and having blood draw.

7. Why are WBC counts performed on a patient sample?

White blood cells count is performed on a patient sample because the count will determine if you have an infection, allergic reaction, inflammation or even blood cancer such as leukemia or lymphoma. This helps the provider determine further what you could be sick with.

8. Describe a differential and why it is performed on patient samples.

A differential is when a CBC (complete blood count) comes back with abnormalities. This helps determine if you have an infection, inflammation, or an autoimmune disease. A differential is often ordered with a CBC. It determines the count of each white blood cell within your blood sample.

9. What is a normal platelet count for a health person?

A normal platelet count for a healthy person is 150,000 to 450,000 per mm<sup>3</sup> platelets in a microliter of blood.

10. Why is blood typing not a CLIA-waived test?

Blood typing is not a CLIA- waived test because CLIA waived tests are specific tests with specific answers with no margin for error. Blood typing is the classification of blood.

11. What is the most frequently tested chemical analyte in the blood?

The most frequently tested chemical analyte serum, to obtain the patients blood serum you will have to obtain the patients blood by performing a venipuncture. After you have obtained the venipuncture you would then place the blood sample in a centrifuge and spin the sample down. The centrifuge separates the plasma and the serum, allowing you to be able to collect the serum, using a pipette and using a separate container to collect the serum in.

12. What factors affect a person's cholesterol level.

Factors that affect a person's cholesterol level are age, your diet, if you smoke, recreational drinking and exercise you get.

13. What two liver enzymes are indicators of liver damage.

The two liver enzymes that can indicate liver damage are AST (aspartate transaminase) and ALT (alanine transaminase). These pass through the blood stream when the liver is damaged.

14. What two hormones produced by the thyroid gland affect body metabolism.

The two hormones produced by the thyroid gland that affect the body's metabolism are known as T3 (triiodothyronine) and T4 (thyroxine).

15. Describe a chemistry panel.

A chemistry panel is a group of tests that are usually routinely ordered to provide a look at a patient's general health status. These tests are performed on blood samples usually drawn from the patient's veins (venipuncture). This helps the provider have a look at how the patient is doing and how their health generally is. Usually this consists of 7 to 25 tests. Some components that make up a chemistry panel are a CMP, which stands for comprehensive metabolic panel. This would include a patient's glucose, calcium, sodium, proteins, and albumin.