

CONSIDERATIONS:

1. Blood specimens obtained by finger-stick are used to collect blood for:
 - a. Capillary blood micro-tubes, sent to lab for analysis
 - b. Point-of-care testing with test strips and special meters, such as glucose and PT/INR testing
2. Capillary blood testing is performed on adults and children when only a small amount of venous blood is needed and venipuncture is too invasive or not possible.
3. Capillary blood can be obtained from multiple sites – earlobe, heels, fingers etc, but the expected site for capillary blood samples are:
 - a. Adults/children: Finger-stick
 - b. Infants, up to 1 year : Heel
 - c. Order preferred to obtain specimen from alternate site
4. Prepare for finger-stick by increasing blood flow to the arm/hand. Ask patient to:
 - a. Wash hands in warm water
 - b. Hang arm down for 30 seconds
 - c. Prick finger with hand below heart
5. Two types of finger-stick devices are available:
 - a. Reusable, pen like devices. Lancets can be changed, but same device is used. These devices are for one patient only
 - b. Single-use finger-stick devices. Only use devices with retractable lancets to prevent sharp injury
[Note: The more firmly the device is pressed against the finger, the deeper the puncture will be]
6. Optimal site for finger stick is the distal lateral aspect of the fingertip, usually the 2nd (middle) finger or 3rd (ring) finger on the non-dominant hand:
 - a. Any finger can be used
 - b. Avoid the center of fingertips (pads)
 - c. Avoid areas with skin abnormalities (cuts, scars etc.)
 - d. The lateral side of each finger has less nerve endings and more blood vessels than the finger tip pads
7. Never squeeze the finger to obtain the drop of blood needed for the test. This causes capillary fluid to dilute the blood specimen. Instead gently massage the hand towards the proximal portion of the finger and then press firmly on the distal joint of the finger.
8. Lancets should be pitched immediately after the stick. However, if patients with diabetes use clean technique in obtaining blood glucoses samples via a reusable pen-like device, the lancet can be reused.

EQUIPMENT:

- Gloves
- Automatic lancing device, self activating or button activated
- Lancet, if needed for device
- Antiseptic wipe
- Test strip or capillary tube
- 2 x 2 gauze sponge or Cotton Ball
- Self-adhesive dressing, if needed
- Puncture-proof sharps container
- Impervious trash bag

PROCEDURE:

1. Use two patient identifiers.
2. Adhere to Standard Precautions (including gloves) and explain the procedure and purpose to the patient.
3. If patient's hands are cold, encourage patient to wash hands with warm, soapy water or rub hands together briskly to warm them.
4. Assemble the equipment on a clean surface close to the patient. Assure that a sharps container is "at hand".
5. Prepare the lancet in the finger puncture device according to the instruction of specific device.
6. Place the patient in comfortable position, making sure that a site is accessible.
7. Gently massage finger from hand to finger tips several times to increase blood flow. Avoid excessive squeezing or "milking" which will cause tissue fluid to be expressed, compromising specimen integrity.
8. Prepare site for test:
 - a. If clinician is pricking finger, clean site with alcohol pad. Allow to air dry or dry with gauze sponge
 - b. Patients with diabetes can rely on washing hands with warm soapy water
9. Grasp the patient's finger firmly with other hand.
10. Firmly place the finger puncture device to the finger and activate the device.
11. If using a single-use finger-stick device, drop it into the sharps container immediately.
12. Wipe away the first droplet of blood with a gauze sponge.
13. Allow drop of blood to form. If blood flow is inadequate, gently massage the hand towards the proximal portion of the finger and then press firmly on the distal joint of the finger.
14. A well-beaded drop of blood should form at the puncture site.
15. Absorb the blood drop with the test strip or capillary tube, filling the test strip or tube completely as per manufacturer's instructions:
 - a. If using a test strip, follow the meter's instructions to complete the test

- b. If obtaining a capillary tube specimen, fill the capillary tube by placing the tube against the puncture site at a 20° to 40° angle until the tube is filled
16. Apply firm pressure to site with gauze sponge until bleeding stops.
17. Run test or prepare tube for lab, as appropriate.
18. Apply self-adhesive dressing to puncture site if needed.
19. Discard soiled supplies in appropriate containers.

AFTER CARE:

1. Document in patient's record:
 - a. Procedure and site
 - b. Test for which specimen was obtained
 - c. Results of test or lab to which specimen sent
 - d. Patient's response to procedure
 - e. Any instructions given to patient/caregiver
 - f. Any communication with physician
2. Communicate with physician about:
 - a. Parameters
 - b. Test results outside of parameters

REFERENCE:

- American Diabetes Association (2012). *Checking Your Blood Glucose*. Retrieved May 28, 2012 from <http://www.diabetes.org/living-with-diabetes/recently-diagnosed/where-do-i-begin/checking-blood-glucose.html>
- CDC (n.d.) Capillary Blood Sampling Protocol. Retrieved May 28, 2012 from <http://www.cdc.gov/nceh/lead/guide/1997/pdf/c2.pdf>.
- CDC (2011). Use of Fingertick Devices on More than one Person Poses Risk for Transmitting Pathogens. Retrieved on May 28, 2012 from <http://www.cdc.gov/injectionsafety/Fingertick-DevicesBGM.html>

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