



**PRAIRIE NORTH REGIONAL
HEALTH AUTHORITY**

POLICIES & PROCEDURES

Number: 15648(P)
Category: Continuing Care
Title: Venipuncture Procedure

Approved by: VP Integrated Health Services

SA J. J. J. J.

Source: Home Care Managers
Date Effective: December 18, 2008

Review Date:					
Initial:					

PROCEUDRE

Equipment:

- Disposable gloves
- Specimen tube
- Chlorhexidine cleaning swabs
- Rubber tourniquet or blood pressure cuff
- Towel to place under client's arm
- Sterile gauze pads (2 x 2)
- Band-Aid or adhesive tape

Syringe Method

- Sterile SEDS needles (20 to 21 gauge for adult, 23 to 25 gauge for child)
- Sterile syringe of appropriate size

Vacutainer Method

- Vacutainer tube with needle holder
- Sterile double-ended SEDS needles

Delivery Guidelines:

Deliver to lab within 2 hours of drawing the blood. Maximum time lapse from drawing blood to time delivered to lab is 3 hours (can be transported at room temperature).

STEPS	RATIONALE
1. Wash hands.	Reduces transmission of micro-organisms.
2. Apply disposable gloves.	Reduces transmission of blood-borne pathogens. Gloves should be worn when handling items soiled by body fluids (CDC, 1987)
3. Gather all equipment needed and bring to client.	Maintains organization and avoids having to leave client while you get more equipment.
4. Close bedside curtain or room door.	Provides for client's privacy.
5. Organize equipment on clutter-free surface.	Reduces risk of contamination and accidents.
6. Assist client to supine or semi-Fowler position with his arm extended straight. Place small towel under upper arm.	Stabilizes client's arm and provides easy access to venipuncture site.
7. Open sterile packages using sterile technique.	Prevents contamination of sterile objects.
8. Select distal site in vein to be used. Veins frequently used for blood sampling include those in antecubital fossa and those in lower arm.	If sclerosing or other damage occurs to vein, proximal site in same vein is still usable.
9. If possible, place client's arm in dependent position.	Permits venous dilation, thereby improving visibility of vein.
10. Place tourniquet 5 – 15 cm (2 – 6 inches) above venipuncture site. Encircle client's arm and pull one end of tourniquet tightly over other, looping one end under other. Do not use a knot.	Allows vein to distend with blood, for better visibility. Permits quick release of tourniquet with one hand.
11. Palpate distal pulse below tourniquet.	Pressure from tourniquet should not impede arterial flow.
12. Select well-dilated vein. It may help to have client make fist. Do not deep tourniquet on longer than 1 – 2 minutes.	Muscle contraction increases venous distention. Prolonged tourniquet time may cause venous stasis and thereby alter test results.
13. Clean venipuncture site with povidone-iodine (Betadine) solution and follow with chlorhexidine. Move in circular motion out from site approximately 5 cm (2 inches).	Betadine is a topical anti-infective; chlorhexidine a topical antiseptic. Together, these agents reduce skin surface bacteria.
14. Remove needle cover from syringe or Vacutainer and inform client that he is about to feel a stick.	Client has better control over his anxiety when he knows what to expect.
15. Place thumb or forefinger of your nondominant hand 2.5 cm (1 inch) below site and pull client's skin taut toward you.	Stabilizes vein and prevents rolling during needle insertion.

16. Hold syringe or Vacutainer and needle at 15 to 30 degree angle from client's arm with bevel of needle up.	Reduces chance of penetrating both sides of vein during insertion. Bevel up causes less trauma to vein.
17. Slowly insert needle into vein.	Prevents puncture of entire vein.
18. With syringe, pull back gently on plunger while securing barrel. Hold Vacutainer securely and advance specimen tube into needle of holder.	Secure hold on syringe of Vacutainer prevents needle from advancing. Pulling on syringe plunger or inserting tube creates vacuum needed to draw blood into syringe or Vacutainer.
19. Note flow of blood into syringe or tube.	If blood fails to appear, indicates that needle is no in vein or vacuum has been lost in specimen tube.
20. Obtain desired amount of blood.	Test results are more accurate when specified amount is drawn.
21. Once specimen obtained, release tourniquet.	Reduces bleeding at site when needle is withdrawn.
22. Remove needle from vein: place gauze 2 x 2 or chlorhexidine pad over venipuncture site without applying pressure. Using other hand, withdraw needle by pulling straight back from venipuncture site.	Pressure over needle can cause discomfort. Straight removal of needle from vein prevents injury to vein and other surrounding tissues.
23. Apply pressure to site.	Pressure controls bleeding. If client has been anticoagulated, pressure may be necessary for 3 – 5 minutes to prevent hematoma formation.
24. For blood obtained by syringe, transfer specimen to tube. Insert needle through stopper of blood tube and allow vacuum to fill tube. Do not force.	Vacuum present in specimen tube causes blood to enter. Forcing blood into tube can cause hemolysis.
25. For blood tubes containing additives, gently rotate back and forth 8 –10 times.	Additives mixed to prevent clotting.
26. Inspect puncture site for bleeding and apply Band-Aid.	Keeps puncture site clean and controls final oozing.
27. Attach properly completed identification label to each tube, affix requisition and send to lab.	Tests should be performed properly. Incorrect labelling can cause diagnostic error.
28. Dispose of needles, syringes, soiled equipment and wash hands.	Reduces transmission of micro-organisms.

Nurse Alert:

Pressure must be applied to the venipuncture site in clients with a bleeding disorder or low platelet count or in those receiving anticoagulant therapy. It will decrease the risk of hematoma formation.

Client Teaching:

If a woman has impaired lymphatic drainage (as may occur following a mastectomy), she should be instructed to tell caregivers to avoid blood sampling from that arm. Impaired lymphatic drainage

results in edema, and venipuncture in that extremity is difficult. Lack of lymphatic flow also predisposes the client to infection from skin puncture.

Pediatric Considerations:

The nurse should not make numerous punctures in a child's arm for blood sampling. This can be extremely upsetting. A young child who requires venous sampling may need restraining by a staff member or parent. This will help immobilize the limb and prevent sudden movement that could result in serious injury to the blood vessel.

Geriatric Considerations:

A frail elderly client's veins are fragile, and venipuncture becomes more difficult. The RN/RPN/LPN nurse should carefully assess such a client before venipuncture so he does not have to be repeatedly stuck with the needle. Because the elderly client's veins are fragile, bleeding may occur more easily in the tissues once the needle is withdrawn.