| 4                      | Department of Health<br>Government of<br>Nunavut |               | NURSING POLICY, PROCEDURE AND PROTOCOLS |                     |                  |  |
|------------------------|--|---------------|---|---------------------|------------------|--|
| Nunavut                |  |               | Community Health Nursing                |                     |                  |  |
| TITLE:                 |  |               |   | SECTION:            | POLICY NUMBER:   |  |
| Therapeutic Phlebotomy |  |               |   | Clinical Procedures | 11-005-00        |  |
| EFFECTIVE DATE:        |  | REVIEW DUE:   |   | REPLACES NUMBER:    | NUMBER OF PAGES: |  |
| February 10, 2018      |  | February 2021 |   |                     | 4                |  |
| APPLIES TO:            |  |               |   |                     |                  |  |
| Community              | Health Nurses                                    |               |   |                     |                  |  |

## POLICY:

Registered Nurses may perform therapeutic phlebotomy, as ordered by a physician. Only nurses who have received additional training with the Nurse educator or delegate will assume this responsibility.

# **DEFINITIONS:**

**Therapeutic Phlebotomy** is a procedure performed to remove a prescribed amount of blood from an accessed vein. It is often used to treat disorders such as hemochromatosis and polycythemia vera.

## RELATED POLICIES, GUIDELINES AND LEGISLATION:

Procedure 11-005-01 Therapeutic Phlebotomy

# REFERENCES:

Parker, D. M., Deel, P.C., & Arner, S.S. (2004). Iron out the details of Therapeutic Phlebotomy. *Nursing*, 34(3), 46-47.

Potter, P.A. & Perry, A.G. (2010). Clinical Nursing Skills & Techniques, 7th edition, Mosby: Toronto.

Wright, S., Finical, J. (2000). Beyond Leeches: Therapeutic phlebotomy today. *American Journal of Nursing*. 100(7), 55-61.



# PROCEDURE 11-005-01

## **NURSING CONSIDERATIONS:**

- 1. Hypotension is the most common adverse effect of phlebotomy, but tachycardia, increased respiratory rate, loss of consciousness, dizziness, weakness, or fatigue may also occur.
- 2. A physician's order is required specifying the volume of blood to be removed (usually 500mls).
- 3. Assess the client prior to the procedure, obtaining baseline vital signs, laboratory results (HGB and Ferritin levels) and ensure client has taken in a minimum of 500 ml of fluids prior to the procedure. Ensure the client has eaten prior to the procedure. If not provide a light meal or snack.
- 4. Place the client on a bed or a stretcher for a first time procedure, not on a chair.
- 5. Assess the client during and post procedure for such adverse reactions as hypotension, hypovolemia and vasovagal response.
- 6. Some clients may require IV hydration either pre, during or post procedure as indicated by physician's order.
- 7. Never attempt venipuncture: in the arm where an arteriovenous fistula/graft is present, on the side affected by a cerebral vascular accident (CVA), or in the arm on the same side that a mastectomy has been performed. In the event the client has had a bilateral mastectomy, the physician will specify which side is to be used.
- 8. Hand hygiene: perform hand hygiene according Policy 10-004-00: *Hand Hygiene* and Guidelines 10-004-01: *Hand Hygiene Guidelines*.
- 9. Antiseptic use: contact time includes scrubbing and drying time. For products containing 70% alcohol e.g., alcohol swab: contact time 30 seconds.
- 10. Personal Protective Equipment Use: Follow Universal Precautions and include additional precautions as required (Refer to Policy 10-005-00: *Personal Protective Equipment*).

| EQUIPMENT |                                     |              |                    |  |  |  |  |
|-----------|-------------------------------------|--------------|--------------------|--|--|--|--|
| ✓         | Phlebotomy set with 17 Gauge needle | ✓            | Tourniquet         |  |  |  |  |
|           | OR                                  | ✓            | Alcohol swabs      |  |  |  |  |
| ✓         | Phlebotomy holder                   | $\checkmark$ | 2 x 2 Gauze pads   |  |  |  |  |
|           | 19G winged needle                   | ✓            | Tape               |  |  |  |  |
|           | 500 ML evacuation bottle            | ✓            | Non-sterile gloves |  |  |  |  |
|           | Thoracentesis set                   |              |                    |  |  |  |  |



## PROCEDURE:

- 1. Assemble equipment.
- 2. Obtain baseline BP, pulse and respirations prior to phlebotomy to allow for comparison during and after the procedure.
- 3. Position the client comfortably and ensure that the arm is supported.
- 4. Place a tourniquet around the upper arm and assess the veins as they distend. The chosen vein needs to be large enough to accommodate a 17-gauge needle.
- 5. Select the vein to be accessed: Determine whether the median cubital vein in the antecubital space is accessible. Basilic, cephalic, and accessory cephalic may also accommodate a large bore needle.
- 6. Cleanse the site with an alcohol swab and access the site. Secure the needle and tubing with tape.
- 7. Once flow is established, take the client's BP, pulse, respirations and ensure the adequacy of peripheral circulation by checking pulse, warmth and color in the limb.
- 8. When the prescribed volume is obtained, release the tourniquet if this hasn't already been done.
- 9. Remove the needle/catheter, apply direct pressure for 3-5 minutes with a 2x2 gauze and instruct client to elevate arm as tolerable to decrease bruising and support the achievement of hemostasis.
- 10. Take BP, pulse, and respirations after the procedure to assess for signs of hypotension.
- 11. Dispose of phlebotomy set into the appropriate biohazard /cytotoxic container, as per Guideline 10-006-02: *Infectious Waste Disposal Guidelines*.
- 12. Encourage a minimum oral fluid intake of 500ml to assist with fluid volume replacement.
- 13. Administer intravenous fluids if ordered (may be ordered post or concurrently with phlebotomy)
- 14. Assist the client when standing or ambulating for the first time post phlebotomy.
- 15. Notify physician if client has any of the following symptoms post- phlebotomy:
  - a. Complaints of feeling faint, dizzy, clammy or light-headed.
  - b. Significant change in vital signs.
- 16. The client may be discharged if no dizziness/light-headedness when ambulating or standing, vital signs are stable, and no bleeding at site post procedure.



# **DOCUMENTATION:**

Document the following on the progress notes in the client's health record:

- 1. Phlebotomy site
- 2. Vital signs
- 3. Amount of blood withdrawn
- 4. Length of procedure and client's tolerance
- 5. Any adverse side effects
- Client education

# **CLIENT TEACHING:**

- 1. Instruct the client to move slowly when changing position or standing to prevent light-headedness, faintness, or a rapid drop in blood pressure.
- 2. Advise the client to drink plenty of liquids over the next 24 hours to replace lost fluid.
- 3. Apply pressure to site if bleeding occurs. Apply cold compresses to minimize bruising. If bruising is severe, advise client to contact their health care provider.
- 4. Advise the client to avoid heavy lifting or strenuous activity for 6-8 hours post procedure.
- 5. Provide follow-up appointment for phlebotomy if required.

## REFERENCES:

Parker, D. M., Deel, P.C., & Arner, S.S. (2004). Iron out the details of Therapeutic Phlebotomy. *Nursing*, 34(3), 46-47.

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| Approved by:                                       | Effective Date: |
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| Intret 11 FEB 2011                                 | *               |
| Chief Nursing Officer Date                         |                 |
| Deputy Minister of Health and Social Services Date | April 1, 2011   |

