|  |  |  |
| --- | --- | --- |
|  | **LABORATORY DEPARTMENT**  **POLICIES AND PROCEDURES** | **Department: PHLEBOTOMY** |
| **Number:**  **141.0-Phlb-gu-rev2/2014** |

|  |
| --- |
| **THERAPEUTIC PHLEBOTOMY** |

**POLICY**

Therapeutic phlebotomies are used as a treatment to reduce blood volumes, or to mobilize and deplete excessive body iron stores. Therapeutic phlebotomy records must be kept for ten years.

**PROCEDURE**

**Physician’s Order**

1. Orders for outpatient diagnostic tests shall be provided on the order of practitioners with clinical privileges at Verde Valley Medical Center.
2. A process is in place to handle patients who do not have a Provider on staff. (See Attachment 3 below).
3. The Physician writing the order has accepted medical responsibility for the patient.

4. The Physician writing the order has clearly stated the goals for the therapeutic phlebotomy in the written orders.

5. The order must include:

a. Patient diagnosis.

b. An order to perform a hemoglobin and/or hematocrit prior to performing the procedure – If the patient has results from another facility, they must have been reported within 72 hours of the procedure. A Pathologist’s approval is needed for any results performed beyond 72 hours.

c. The amount of blood to be removed must be clearly stated on the order

d. Hemoglobin or hematocrit criteria before the procedure is performed

Note: The Pathologist must be consulted if the criterion listed is below the upper limits of Verde Valley Medical Center’s normal ranges for hemoglobin and/or hematocrit (see ranges marked with an asterisk in the chart below).

If hemoglobin/hematocrit criteria are not met, the ordering Physician isnotified and the therapeutic phlebotomy will not be done and may need to be rescheduled.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Female** | **Normal Range** | **Male** | **Normal Range** |
| **Hemoglobin** | <13.0g/dl\* | 12.0 – 16.0 | <15.0g/dl\* | 14 – 18g/dl |
| **Hematocrit** | <37.0%\* | 36 – 48 % | <43%\* | 42 – 50 % |

6. A diagnosis of Hemachromatosis must be included on the written order. The therapeutic phlebotomy is still warranted in this case even if the values are outside of the criteria listed. The Pathologist must be consulted.

1. If the ordering physician wants the procedure to proceed:
   1. The physician will need to write a new order stating the revised values of the hemoglobin and hematocrit. These must fall within the guidelines previously noted.
   2. Consult with the Pathologist if the physician cannot be reached or if the patient needs to be counseled.
2. The Phlebotomy Scheduling Book must include the following information
   1. Patient’s name
   2. Patient’s phone number
   3. Time of the appointment
   4. Physician

**Materials**

1. Blood Pressure Cuff
2. Disposable blood collection bag with needle/or bottle with collection set
3. Alcohol and Iodine Swabs
4. Scale (calibrated each day of use)/not necessary if using glass bottle
5. Hemostats(2)
6. Coban
7. Tape
8. Gauze
9. Gloves
10. Squeezable item (PVC pipe)
11. Juice

**Patient Preparation**

1. Identify yourself and greet the patient.
2. Ask the patient to identify him/herself with their first and last name and date of birth.
3. Check name and date of birth on their hospital wristband to verify correct identification (two identifiers).
4. Verify that the patient identifier information matches the computer generated label.
5. Wash your hands according to the hospital hand wash protocol in front of the patient.
6. Put on gloves in front of the patient.
7. Draw the Hemoglobin and Hematocrit according to venipuncture protocol.
8. Send specimens to laboratory. Contact a technologist to make them aware patient is waiting and results need to be run STAT.
9. Patient should remain in drawing room.
10. Remove gloves and wash hands.
11. Results must meet physician’s stated criteria for H & H.
    1. Consult with a technologist or Pathologist if the patient needs to be counseled in the event that the procedure is delayed.

**Patient Procedure:**

1. Take blood pressure of patient:
   1. Systolic blood pressure: Acceptable = 90-180 mm Hg
   2. Diastolic blood pressure: Acceptable = 50-100 mm Hg
   3. If blood pressures fall outside of these ranges, the therapeutic phlebotomy should not be performed and the ordering physician should be contacted.
   4. Consult a technologist or Pathologist to call the ordering physician to cancel the test. Add a comment to the therapeutic phlebotomy order documenting the ordering physician’s name, the reason for cancellation of the test, the time, date and initials of the technologist. Read back verification must be done and documented.
2. Verify that the scale is level prior to calibration.(bag only)
3. Calibrate scale.(bag only)
4. If reading is not acceptable, verify zero reading of scale.
5. Repeat the calibration. If repeat calibration is not acceptable, remove scale from service. Inform the Phlebotomy supervisor.
6. A pre-marked glass bottle may be substituted if calibration is not acceptable.
7. Prepare collection bag/bottle for use.
8. Rewash hands with soap and water in front of the patient.
9. Put on a clean pair of gloves.
10. Prepare patient by sterilizing around the puncture site three inches in diameter.
    1. Scrub the site with a 70% alcohol prep pad for a minimum of 30 sec.
    2. Use a Povidone-iodide pad for 60 sec to cleanse the site, beginning in the center and moving outward in concentric circles without going over any area more than once.
    3. Allow the site to air dry.
11. Apply the blood pressure cuff.
    1. Inflate the cuff 40-60mm Hg. Clamp off with a hemostat.
    2. Do not palpate anywhere within the puncture site.
12. Clamp tubing of collection bag/bottle with hemostat approximately 3-4 inches below the needle.
    1. Air and anticoagulant are prevented from flowing from needle and entering collection bag/bottle and tube.
    2. Agitate the collection bag approximately 1-2 min to coat the inside of the bag with anticoagulant.
13. Remove the needle cover and examine needle for defects.
    1. Do not touch the needle.
    2. Do not let the needle come in contact with any surface.
14. Insert needle.
    1. Pull the skin taut by using the thumb of the free hand placed below the prepared puncture site.
    2. Insert the needle quickly with the bevel of the needle in the up position.
    3. Use a less than 20° angle of insertion.
       1. If the patient complains of unusual pain, adjust the needle. If the pain does not subside, remove the needle immediately.
       2. After the needle has been inserted, it is acceptable to touch scrubbed area to adjust the needle as long as the actual insertion site or needle is not touched.
15. Release the hemostat.
    1. Blood should begin to flow through the tubing immediately.
    2. If no blood appears, adjust the needle.
16. Tape the tubing to the patient’s arm and wrist or arm support to prevent movement of the needle.
17. Encourage the patient to open and close fist by squeezing the tube to enhance blood flow into the bag/bottle.
18. Place a 2X2 gauze pad over the puncture site to prevent contamination of the site.
19. Reduce pressure on pressure cuff to 40mm Hg.
20. Mix the collection bag by gently inverting once or twice.
21. If using a bag, monitor the scale.
22. When the scale/bottle reaches 500g/500mL the phlebotomy is complete.
23. When complete, discontinue phlebotomy:
    1. Release all pressure from pressure cuff.
    2. Clamp tubing with hemostat.
    3. Remove needle.
       1. Stabilize needle and remove tape.
       2. Grasp hub and remove needle quickly, adding pressure to gauze pad at puncture site.
       3. Have patient apply pressure to the puncture site.
       4. Have patient hold arm in vertical position, keeping it straight for 30-60 sec.
       5. Patient may then lower arm and continue to apply pressure.
       6. Secure gauze over puncture site with coban and inform patient they may remove gauze in 2-4h.
24. Dispose of collection bag/bottle and needle in a large sharps container.
25. Wash hands
26. Provide the patient with juice and have them remain seated in the phlebotomy chair for 15-20 min post procedure to ensure there are no complications. Make sure bleeding has stopped before releasing the patient.
27. Observe the patient prior to releasing for any adverse effects such as dizziness, pallor or hyperventilation. Monitor the patient’s blood pressure if needed.
28. If any adverse effects develop, call the Rapid Response Team (Pager number – 2145150)

If adverse effects persist or seem unusual, report these to the pathologist or the attending RN. In acute outpatient situations when the attending physician or pathologist is not immediately available to an outpatient, the Rapid Response Team should be called.

27. Document the volume of blood removed from the patient and the Lawson ID of the phlebotomist.

28. Complete a form to be sent to the Clinical Laboratory.

* 1. Document Cerner ID and time of collection on the large Cerner label and attach to lower portion of form.
  2. Document the volume of blood removed on the appropriate area of the form.
  3. Log the therapeutic phlebotomy into the computer and send the form to the Laboratory. A technologist will enter the results into the Hospital computer system.
  4. When all information has been entered into the computer, the form will be filed in the front office file drawer.

**ATTACHMENT 3:**

Process for Patients with a Provider who is not on Staff

* Patient will contact Central Scheduling or OP LAB

If OP Lab was contacted

* Explanation will be given to patient (ie. patient must be seen by a provider on staff)
* Once patient agrees to the appointment, it will be necessary to get a contact number of the patient and have VVMC Primary Care call them back with a time, etc.
* OP Lab will check and see when they could do the Phlebotomy
* OP Lab will call Susan Browne @ 928-451-1102 – the telephone number we need to call her from is 639-5305. It is important to use this number, because if it appears on her phone, she will answer it, even if she is in a meeting.
* We will need to tell Susan when we will be available to do the Phlebotomy (This week, next week, between theses times, etc… No specific date has to be given)
* She will schedule the patient to see the Provider ASAP
* Susan will contact the patient to provide them with the information (Provider appointment, Time etc.)
* When patient is seen by the Provider, they will give the patient a requisition and scheduling card with Central Scheduling’s phone number.
* The patient will call Central Scheduling and schedule the Phlebotomy with them.

If Central Scheduling was contacted

* Ask the patient the best contact number is to have someone from the lab call them.
* Call 35300 to notify the lab that a patient needs a phlebotomy and that it is for an out of town physician. Give them the contact information of the patient.

VVMC Primary Care has been given a copy of our requirements that must be met before a Phlebotomy can be performed.

The order must include:

a. Patient diagnosis.

b. An order to perform a hemoglobin and/or hematocrit prior to performing the procedure – If the patient has results from another facility, they must have been reported within 72 hours of the procedure. A Pathologist’s approval is needed for any results performed beyond 72 hours.

c. The amount of blood to be removed must be clearly stated on the order in cc’s.

d. Hemoglobin or hematocrit criteria before the procedure is performed

If hemoglobin/hematocrit criteria are not met, the ordering Physician isnotified and the therapeutic phlebotomy will not be done and may need to be rescheduled

e. Frequency if the patient is going to need a phlebotomy more than the one time.

**ATTACHMENTS**

1. Therapeutic Phlebotomy Log Sheet
2. Therapeutic Phlebotomy Result Form

3. Process for Patients with a Provider who is not on Staff

**REFERENCES**

1. American Association of Blood Banks (2002). *Technical Manual,* 14th Edition, Bethesda, MD.
2. American Association of Blood Banks, 23rd Ed. (2004). *Standards for Blood Banks and Transfusion Services*. Bethesda, MD.

|  |  |  |
| --- | --- | --- |
| **Prepared by/Title/Date:**  DD,MT(ASCP)/Oct.05  **Approved by/Title/Date:**  Signature on File in Lab | **Committee Approval/Date:**  Policy & Procedure \_\_\_\_\_\_ | **Dates Reviewed/Revised:**  7/07, 1/08, 2/09, 8/09,7/11,10/11,10/2013,  2/2014 |