**Therapeutic Phlebotomy Guideline**

**Purpose:** Therapeutic Phlebotomy (TP) is ordered at periodic intervals as a treatment for patients with blood dyscrasias. Blood obtained through TP is discarded and not used for transfusion.

**Application:** The procedure is applicable to both outpatients and inpatients being referred for TP. Most patients will have polycythemia vera or hemochromatosis as a diagnosis.

**Equipment:**
- Physician orders
- TP informed consent (form #)
- Chloroprep,
- Tourniquet and squeeze ball
- 2x2 gauze
- 4x4 sterile gauze
- Coban wrap
- Tape

**Ambulatory Only:**
- HemoCue machine and lancet
- Single CPD (anticoagulant citrate phosphate dextrose)Blood Pack (Lawson # 4r0012mc)
- Donor Care needle guard
- Tip scale, Blue disposable chux

**Inpatient:**
- IV 20g or larger
- 30cc or 60cc Syringes
- Stopcock if desired

**Procedure**
- The following orders should be included for a patient receiving therapeutic phlebotomy:
  - Hematologist involved, including consent for procedure & all risks associated
  - Lab values to be assessed specific to the patient’s diagnosis.
  - Parameters for laboratory values guiding the indication for phlebotomy (Hemoglobin result from lab or HemoCue)
  - Frequency of TP
  - Specified volume of blood to be withdrawn.
  - Monitor vital signs before and after the procedure
• Prevent, manage and recognize common side effects, such as hypovolemia, nausea/vomiting, or rare adverse effects, by: see order
• Encouraging oral hydration before/after the procedure, Patient can & should eat meal prior to procedure.
• Assess readiness for procedure
• Administering parenteral solution replacement if prescribed – indicating the type of solution, amount, and rate of infusion.
• Select the most appropriate vascular access device (VAD) based on patient condition, anticipated length of treatments needed, and other infusion therapies:
  • If Inpatient can use a short peripheral catheters using a 20 gauge or larger device and inserted before phlebotomy and removed upon completion.
  • Central vascular access devices (CVAD) if already placed, and therapeutic phlebotomy will not compromise other infusion therapies.
  • Apheresis catheter
  • The 16 gauge IV device attached to the CPD single blood pack unit for ambulatory procedure.
• Blood collection receptacles may include:
  • CPD Single Blood Pack Unit
  • Syringes may also be used based on the VAD
  • Do NOT use vacuum containers to facilitate blood flow due to the risk of air embolism
• After completion of TP, manual pressure should be maintained at the venipuncture site after removal of the peripheral catheter until bleeding has stopped, then a dressing applied. Keep dressing on for at least 1 hour post procedure.
• After completion of TP, the patient should remain in a reclining position for several minutes, then instructed to rise slowly.
• Provide patient education, including:
  • Encourage pre and post procedure hydration.
  • Potential side effects such as hematoma, syncope, and nausea/vomiting.
  • The type and amount of physical activity before and after the procedure.
• Documentation should include:
  • Total volume of blood withdrawn
  • Patient response to procedure
  • Vital signs before and after the procedure
  • Dressing applied to venipuncture site or catheter locking
  • Patient education/instructions

**Ambulatory TP Process:**

• Obtain CPD Single Blood Pack after establishing Hgb is at appropriate level for procedure as prescribed.
• Apply tourniquet above the elbow, assess for appropriate vein. Release tourniquet
• Place Trip Scale in position on top of blue chux, lay bag and tubing on scale, zero scale. Thread the draw line through the clamp.
• Prep access site for 30 seconds with ChloraPrep and allow to air dry.
• Reapply tourniquet.
• Place needle guard on tubing of blood pack bag close to the needle (open end toward needle).
• Make loose open knot in the blood tubing away from the needle and needle guard
• Preform venipuncture.
• Press “Start” on the scale. Allow blood to flow into the bag, Tape the needle (bevel up) and cover with sterile gauze. Release the tourniquet and reapply snugly but NOT tightly, have patient squeeze the ball to maintain a constant blood flow.
• Monitor patient closely for signs and symptoms of a reaction, also instruct patient to keep arm straight and not to move arm.
• When volume on scale starts to reach amount ordered to withdraw (usually 450cc), press Stop on scale, release tourniquet, remove needle and pull needle into needle guard, place sterile gauze over venipuncture site, elevate arm and have patient hold pressure on site. Tighten tubing to make knot.
• Cut the tubing close to the needle and dispose of needle into the sharps container and dispose of the blood bag into biohazardous waste.
• Have patient rest for 10 to 15 minutes, offer PO nourishment.
• Record post TP blood pressure and pulse, and volume drawn.
• Discharge patient when the discharge criteria have been met.

Inpatient TP Process:

• Check MD order for amount of blood to be removed (Hematology should order amount to be removed).
• Apply tourniquet above the elbow, assess for appropriate of IV site (20g or larger).
• Obtain IV access and release tourniquet.
• Scrub the hub of IV for 30 seconds with ChloraPrep and allow to air dry.
• Reapply tourniquet.
• Draw samples from IV, discard each syringe when full. May use stop cock method to change syringe. Continue process until desired amount removed (per MD order).
• Monitor patient closely for signs and symptoms of a reaction.
• Have patient rest for 10 to 15 minutes, offer PO nourishment.
• Record post TP blood pressure and pulse, and volume drawn.
• Please page Critical Care Resource Nurse with questions.