

SUBJECT: Blood Collection from Patients with Intravenous Infusions

Effective Date: August 24, 2005

Supersedes: October 17, 2003

Medical Director: Vincent DeRisio, D.O.

Administrator: _____

Written By: Barb Beyersdoerfer, CLPlb (NCA)

Revised: Carolyn Smith, CPT (IAPS), Lisa Shaw, MT (ASCP)

Annual Review: August 2006, July 2007

Purpose:

At times it may be necessary for a blood collector to obtain a blood specimen from the same extremity in which there is an intravenous infusion (I.V.).

Responsibility:

All Health Care Associates who obtain blood through venipuncture.

Procedure:

A Venipuncture should always first be attempted on the patient's arm without an IV. If this situation is not feasible, then the following procedure should be adhered to:

A. BELOW an I.V.

The blood collector should first attempt to draw the specimen from a site below the intravenous insertion site.

1. The blood collector contacts the patient's R.N. to turn off the I.V.

2. If an R.N. is not available, an “unsuccessful attempt” form is to be completed and left at the nursing station.
3. To ensure that the infusion is resumed as soon as possible after the specimen is obtained, the R.N. who turned the I.V. off should remain in the patient’s room while the specimen is being obtained.
4. Once the I.V. has been turned off the blood collector must wait **2 minutes** before collecting the specimens. The blood collector must then draw 2-3 mL of blood in a **plain red top tube** as a “flusher” (waste) and discard into a sharps container before drawing the blood specimens required.
5. The R.N. should re-start the I.V. If the R.N. had to leave the room, prior to the completion of the phlebotomy procedure, the blood collector must notify the R.N. to restart the I.V. If the I.V. is not restarted promptly, complications may occur.
6. The blood collector must indicate on the tube(s) and orders (requisition or computer labels) that the specimen was “drawn below an I.V”. Also indicate the fluids that were being infused.
7. This information will be entered into the LIS as a Report Note, using the coded comment “BV” specimen drawn below I.V. Also indicate what fluids were being infused.

B. ABOVE an I.V.

If there is no suitable venipuncture site on the opposite arm OR below the I.V. site, the blood collector should:

1. Check with the R.N. to see if the patient’s physician has written an order to allow a venipuncture above the I.V.
2. If there is no order and none can be obtained, a skin puncture should be performed; if this is not feasible, an “unsuccessful attempt” form should be completed.
3. If the physician has written an order allowing a venipuncture above the I.V., proceed as above in step “A”.

4. The blood collector must indicate on the tube(s) and orders (requisition or computer labels) “drawn above I.V per Dr._____”. Also indicate what fluids were being infused.
5. This information will be entered into the LIS as a Report Note, using the coded comment “AV” specimen drawn above I.V.

BLOOD COLLECTORS MAY NEVER STOP OR RESTART AN I.V.

C. Heparin or Saline Locks

Care should be taken not to interfere with any indwelling line. If blood needs to be collected on the same arm as a heparin or saline lock, Phlebotomists or Patient Care Assistants are **NOT** permitted to collect blood directly from these devices.

As long as no fluids are being currently infused it is permissible to collect blood below or above a heparin or saline lock. However, do not draw blood near or from the same vein the heparin or saline lock is in. Also avoid drawing above a heparin or saline lock if infusion or flush has been recent.

D. RN Line Collections

RN’s who collect blood through intravenous lines that have previously been flushed with heparin should be avoided for hemostasis samples. However, when samples must be collected through these lines, the lines must be flushed with a minimum of 5mL of saline and the first 5mL of blood or 6-times the line volume (dead space volume of the catheter) must be drawn off and discarded before the coagulation tube is filled.

References:

1. NCCLS guidelines, 10.6 Intravenous Fluids. H3-A4, Vol. 18 No. 7, June 1998
2. Christ Hospital Nursing Services, “Phlebotomy from Extremity with IV”, Vol. 1, Sec. 7, No. 128a-b. 1/14/04.
3. CAP Hematology Checklist HEM. 22707 2005
4. Phlebotomy Handbook, Blood Collection Essentials, Garza & Becan-McBride 7th edition, 2005