


## Standard Operating Procedure

 <b>Eastern Health</b> Laboratory Medicine	<b>Section:</b> Management System\Eastern Health\Biochemistry\Collection Manual\		
	<b>Title:</b> Unique Venipuncture Situations		<b>Number:</b> 7012
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### **Purpose or Principle**

This procedure provides instructions for a variety of complications that may be encountered during the blood collection procedure.

### **Materials**

#### Reagents

Not Applicable

#### Supplies

Not Applicable

#### Equipment

Not Applicable

### **Sample**

Not Applicable

### **Special safety precautions**

Not Applicable

### **Quality Control**

Not Applicable

### **Procedure:**

Follow the activities below when encountering a unique venipuncture situation as listed below.

#### **Fainting (Syncope)**

**Notes:**

- Patient becomes dizzy and faint at the site of blood due to fasting or other factors.
  - Signs that a patient is about to faint include; blood draining from their face, rapid breathing, sweating and restless movement. May also complain of hearing and vision problems.
  - Always ask whether a patient has allergies, phobias or has fainted during any previous injections or blood draws before starting the procedure. If yes, have the patient lay down for the procedure.
1. Remove the tourniquet and needle immediately, have the patient lower the head and arms between the knees if sitting, and breathe slowly and deeply.
  2. Request help to move the patient if sitting, never attempt to move the patient alone.
  3. Talk to the patient calmly, apply a cold wet towel to the back of the neck and forehead, offer juice or water to the patient.
  4. Do not allow the patient to leave until they have recovered.
  5. Submit an occurrence report.

**Patient with small Veins and Children****Note:**

- Some patients require special care. They may have small veins or have scar tissue from numerous draws or therapy. A warm compress can be used for 5 to 10 minutes before venipuncture to make veins more prevalent.
1. Collect using a butterfly needle in this situation 23 gauge in conjunction with the use of pediatric tubes minimizes the stress, reducing the risk of collapsing smaller fragile veins.

**Allergies****Note:**

- There are many different types of allergies that a patient may present with. Most common allergies for patients having venipuncture are isopropyl alcohol, iodine, adhesives on band aids, tapes, and/or possible latex allergy.
1. Ask all patients prior to the beginning the venipuncture if there are any know allergies.
  2. Remove any materials a patient has indicated will cause them to suffer an allergic reaction.

3. Use alternative products during the venipuncture procedure.

### **Failure to draw blood**

#### **Note:**

- This may be due to the needle being inserted incorrectly, vacuum lost in the tube or collapsing veins.
1. Reposition needle gently and carefully, if inserted incorrectly withdraw slightly, and reinsert.
  2. Change the tubes if you suspect the vacuum is lost and always have extra tubes within reach.
  3. Change to a short-draw tubes with a 23 gauge butterfly needle for patients with fragile or thin wall veins.

### **Hematomas**

#### **Note:**

- Occur when the area around puncture site begins to swell indicating that blood is leaking into the tissues which will result in a bruise due to partial insertion into the vein.
1. Remove the needle immediately and apply pressure for 2 minutes and recheck to ensure bleeding has stopped.
  2. Notify a healthcare provider immediately if bleeding does not stop.
  3. Submit an occurrence report.

### **Petechiae**

#### **Note:**

- Small red spots on the patient's skin may indicate rupture of minute veins below the skin which may be due to coagulation problems or abnormalities. The MLA should be aware of the fact that the patient may bleed excessively after blood collection.
1. Check the patient arm to make sure bleeding stops prior to leaving the patient.

### **Excessive bleeding after venipuncture**

#### **Note:**

- Excessive bleeding may occur if a patient is on anticoagulants, aspirin containing medications or has a decreased number of platelets.

1. Do not leave the patient until bleeding has stopped.
2. Apply pressure with clean gauze pad for at least two minutes and tell patient to apply pressure to the site to help promote clotting.
3. Notify a healthcare provider if bleeding does not stop
4. Submit an occurrence report.

## Neurologic

### Note:

- If a nerve is touched the patient may feel a sharp shooting pain along the arm and/or tingling in the fingers. Remove the needle immediately, explain to the patient the numbness or tingling could last a few hours and if the pain persists or becomes worse seek medical attention. For inpatients, notify the nursing staff or physician of the incident.
1. Immediately discontinue the venipuncture.
  2. Ask the patient if you may repeat the venipuncture in another site.
  3. Submit an occurrence report.

## Seizures

### Notes:

- Rare complications immediately stop the venipuncture.
  - Signs of seizure include; difficulty talking (may stop talking, make nonsense or garbled sounds, keep talking or speech may not make sense). Lack of movement or muscle tone (unable to move, loss of tone, neck and head may drop forward, loss of muscle tone in body and person may slump or fall forward). Tremors, twitching or jerking movements (may occur on one or both sides of face, arms, legs or whole body, may start in one area then spread to other areas or stay in one place).
1. Call for help from co-worker, never leave the patient alone.
  2. Do not place anything in the patient's mouth.
  3. Submit an occurrence report.

## Vascular Access Devices

### Notes:

- Lab staff are **NOT** permitted to draw blood from any Vascular Access Devices.

- When lab staff encounter limbs with artificial devices such as; Cannulas, Fistulas, Vascular Grafts or PICC Lines, these limbs should only be used for venipuncture in exceptional circumstances with written consent from a physician. Record the name of the physician in Meditech.
- Lab staff must check with nursing staff to see if blood can be drawn from line by nursing staff; if required, lab drawn blood may still be necessary.

## **Patients with Continuous Infusion I.V.**

### **Notes:**

- Pay close attention to the location of IV sites. Patients with IV lines should be drawn from the opposite arm if possible.
  - It is not best practice to collect blood samples by venipuncture above or below an IV insertion site with continuous infusion.
  - If no site is available other than above or below a continuous infusion a physician's order must be provided to the phlebotomist prior to the collection, as samples will not be processed in the lab without the verification of an order.
1. Draw blood above an IV site if it has not been used for infusion for 15 minutes prior to collection.
  2. Draw blood below an IV if it has not been used for infusion for 2 minutes prior to collection.
  3. If lab staff must collect from above or below an IV line, Collect 2 x's the dead space of the IV line as a discard before collecting a specimen and for coagulation tests, 5ml of blood or 6 x's the dead space volume to minimize contamination of the blood specimen.
  4. Record in Meditech if a specimen is collected above or below an IV site with continuous infusion. Edit the original order in the comment section record "drawn above or below IV site with physician approval". Record the name of the physician and what was running prior to the IV shut off in Meditech.

## **Mastectomy Patients**

### **Note:**

- Specimens should not be collected from the arm or hand on the same side as a mastectomy; lymphostasis may occur because adjacent lymph nodes have been removed.
1. Use the arm or hand on the same side as a mastectomy only if all other sites have been ruled out and only with written consent from physician (record this in meditech

**Extensive Scarring or Healed Burn Areas****Note:**

- Never collect blood from these areas.

**Patient being Transfused with Blood Products**

1. When a patient is being transfused with blood products and a blood test is ordered the MLA must wait at least 15 minutes post transfusion before drawing blood samples.  
\*If a physician requests a blood draw during a transfusion, document the request in Meditech, record the full name of the physician, ("Blood was drawn during transfusion, requested by Dr. XXXX).

**Accidental Arterial Puncture****Note:**

- When an MLA inadvertently punctures an artery the standard for applying pressure to the artery is the same as a routine stick for an arterial blood gas.
1. Remove the needle immediately.
  2. Apply direct pressure to the site for a minimum of five minutes or until bleeding has stopped.
  3. Inform patient of the incident and tell them to seek medical attention if there is increased swelling or bruising.
  4. Notify Health Care Provider of the incident.
  5. Submit an occurrence report.

**Calculations**

Not Applicable

**Interpretation/Results/Alert values**

Not Applicable

**Reference intervals**

Not Applicable

**Method performance specifications/limitations**

Not Applicable

**Result reporting**

Not Applicable

**References**

- CLSI Standard H3-A6 – Procedures for the Collection of Diagnostic Blood Specimens by Venipuncture; Approved Standard – Sixth Edition
- Phlebotomy Essentials Fourth Edition – Ruth E. McCall and Cathee M. Tankersly. Published by Lippincott Williams and Wilkins, 2008.
- Becton Dickinson Vacutainer Systems
- Johns Hopkins Medicine Pathology Volume I – POC and Phlebotomy/Specimen Collection
- Calgary Laboratory Services Blood Collection Guidelines
- Blood Specimen Collection FAQ, 2008

**Related procedures**

- Collection of Blood Specimen by Venipuncture Orig ID 6975
- Collection of Blood Specimens by Finger puncture Orig ID 6974
- Collection of Blood Culture Specimens Orig ID 6972
- Unable to Collect Blood Specimen Orig ID 7011

**Documents/Forms/Records**

Not Applicable

<b>Document Change Log</b>	
<b>Date</b>	<b>Changes</b>
18/August/2015	Original
9/November/2016	Sections updated under Patients with Continuous Infusion and Vascular Access Devices
30/May/2019	Updated Patients with Small Veins and Children and Patients being Transfused with Blood Products.