



PCC.PHLEB.6.0 ADVERSE REACTIONS TO VENIPUNCTURES

PURPOSE

Patients may experience any of several adverse reactions to the venipuncture procedure. Fainting, nerve damage, and bruising are among the most serious or common of these reactions.

Fainting, also called syncope, is a sudden loss of consciousness due to a lack of sufficient blood and oxygen reaching the brain. The first symptoms a person feels before fainting are dizziness and feeling hot. Moments later, the person's vision turns black and he or she drops to the floor (or slumps if seated in a chair). A patient may experience a vasovagal syncope due to the stress of the blood draw. Symptoms may include nausea, sweating, inability to hear properly, difficulty speaking, exhaustion, tightness in the throat and blurry vision. These symptoms may last anywhere from seconds to minutes. This may be an episode of fainting; the individual regains consciousness within seconds to minutes. Upon regaining consciousness, the individual may appear flushed and feel generally lethargic. The heart rate may still be fast, although it usually soon returns to normal.

On occasion a patient will indicate that there has been an injury, such as pain or a hematoma (bruise), during venipuncture and is in need of medical care. Appropriate action will help alleviate the patient's fears.

SCOPE

This SOP applies to all MA CL locations where venipunctures are performed.

OWNERS

QA and Safety Officer
PCC Supervisors

RELATED POLICIES AND PROCEDURES

QA.SPEC.1.0 *Specimen Collection—Verification of Patient Identification*
PCC.SPCOL.1.0 *Identification of Patients and Specimens*
PCC.PHLEB.1.0 *Venipuncture, Evacuated Tube or Butterfly*
SAFE.GEN.2.3 *Visitor Incident Report Form*

PROCEDURE—ASSISTING A FAINTING PATIENT

- A. If before or after the venipuncture the patient feels symptoms of fainting or faints, do not leave the patient. Lower the patient's head toward their knees/lap while holding him or her in the chair. Call for assistance if additional laboratory personnel are available.
- B. If the patient is sitting in a lounge chair, the chair should be tilted back with patient's feet elevated. If the patient is conscious, have them breathe slowly to avoid hyperventilation.
- C. When the patient is fully recovered, if possible, move him or her to a place where they can lie down. Place their head lower than their feet. If space is not available to have the patient lie down, keep the patient in the chair. Place cold or wet towels on their forehead or neck. Keep them lying down or sitting calmly for at least 15 minutes or until they are fully recovered.



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- D. The patient may be offered a small amount (20-25 mL) of orange juice.
- E. If the patient's condition warrants it, contact the patient's physician to explain what happened. The physician may want to see the patient.
- F. For severe reactions, extensive perspiration, convulsions, persistent clamminess or gray color, or does not revive in 2-3 minutes, contact your emergency contact.
 - 1. Call 911 for a facility not located in a hospital.
 - 2. Emergency Department in a hospital setting.
- G. Complete a *Visitor Incident Report Form* (SAFE.GEN.2.3). Send form to supervisor.
- H. Supervisor will enter the Visitor Incident Report Form (SAFE.GEN.2.3) information in Hc1 to document the patient incident. The type of incident is safety. Document the patient's reaction and whatever actions the associate took.
- I. Supervisor forwards the Visitor Incident Report Form (SAFE.GEN.2.3) to the Safety Officer.

PROCEDURE—ASSISTING A CONVULSING PATIENT

- A. Convulsions are usually mild and brief and accompany fainting. If before, during, or after the venipuncture the patient feels symptoms of fainting or faints, or begins to convulse, do not leave the patient.
- B. Immediately remove tourniquet and needle if venipuncture still in process.
- C. Call for assistance if additional laboratory personnel are available.
- D. If possible, gently lower the patient to the floor while protecting their head. Do not restrain patient or place anything in their mouth, simply protect patient from hurting him or herself by removing obstacles and protecting their head.
- E. When the patient is fully recovered, if possible, move him or her to a place where they can lie down. Place their head lower than their feet. If space is not available to have the patient lie down, keep the patient in the chair. Place cold or wet towels on their forehead or neck. Keep them lying down or sitting calmly for at least 15 minutes or until they are fully recovered.
- F. The patient may be offered a small amount (20-25 mL) of orange juice.
- G. If the patient's condition warrants it, contact the patient's physician to explain what happened. The physician may want to see the patient.
- H. For severe reactions, extensive perspiration, convulsions, persistent clamminess or gray color, or does not revive in 2-3 minutes, contact your emergency contact.
 - 1. Call 911 for a facility not located in a hospital.



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2. Emergency Department in a hospital setting.
 - I. Complete a Visitor Incident Report Form (SAFE.GEN.2.3). Send form to supervisor.
 - J. Supervisor will enter the Visitor Incident Report Form (SAFE.GEN.2.3) information into Everest to document the patient incident. The type of incident is safety. Document the patient's reaction and whatever actions the associate took.
 - K. Supervisor forwards the report form to the Safety Officer.

PROCEDURE—PATIENT INJURY

- A. There are two common complaints (bruising and nerve damage/arm pain) that a patient will make after a blood specimen has been obtained. These can be immediate responses or responses days or weeks later.
- B. Very few patients experience any type of reaction to having their blood taken. A script to use for explanation would be as follows:
 1. If you should feel weak or light headed, stop what you are doing and lie down for a few minutes until the feeling passes.
 2. If a bruise should develop, apply an ice pack for approximately 20 minutes in the first 24 hours. If your arm is still tender after the first day, you may apply warm, moist cloths for 20 minutes four times a day and/or take non-aspirin containing pain medication.
 3. If you experience any difficulty or progressive worsening of any problems as a result of your blood collection, please contact your physician.
- C. Bruising (hematoma) is the most common injury to a patient. A hematoma is the leakage of blood out of a vein during or after venipuncture that causes a bruise. This is caused when the needle nicks the wall of the vein, the needle punctures through the vein during venipuncture, or blood leaks around the needle shaft. A lump can develop during or immediately after venipuncture, or even after the patient has left. The size of the lump is an indication of the amount of bleeding that has occurred. As the blood migrates in the tissue toward the skin, the characteristic discoloration or ecchymosis (the black and blue) will appear.
- D. Treatment of a hematoma:
 1. Immediately discontinue the venipuncture if you notice a swelling (lump) under the skin. Apply pressure to the site and hold this pressure until the bleeding has stopped.
 2. Apply ice packs wrapped in a washcloth or towel to the site. This will help control bleeding, swelling, discoloration and pain.
 3. The venipuncture should be bandaged tightly to apply continual pressure.
 4. The patient should be informed that a black and blue mark may appear and it will take at least a week for it to totally disappear.
 5. Complete a MACL Visitor Incident Report Form (SAFE.GEN.2.3) to document the patient incident. Send form to Supervisor.



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6. Supervisor will enter the Visitor Incident Report Form (SAFE.GEN.2.3) information into Hc1 to document the patient incident. The type of incident is safety. Document the patient's reaction and whatever actions the associate took.
 7. Supervisor forwards the report form to the Safety Officer.
- E. Techniques to prevent hematomas:
1. Remove the tourniquet before removing the needle.
 2. Apply a small amount of pressure to the area after removal of the needle. Also apply a tight bandage over the gauze.
 3. Do not use superficial veins.
 4. Puncture only the uppermost wall on the vein. Do not puncture through both sides of the vein. Partial penetration may allow the blood to leak into the tissue surrounding the vein.
 5. If there is a possibility that the patient will move during the venipuncture, the phlebotomist should take special care to hold the arm still during the venipuncture, The best method is to have someone else help hold the patient's arm. This is especially important with the pediatric or combative patient.
 6. After a venipuncture is performed in the antecubital area, do not bend the elbow with the gauze held in the bend of the arm. The clot will often break loose as soon as the arm is extended. It is preferable to hold the arm straight, over the head if possible, with the gauze pressed gently but firmly over the area of puncture.
- F. Nerve Damage is rare when a sample is properly collected. The major nerves are deep and usually do not present a risk.
1. Avoid deep probing punctures that go well below the veins.
 2. If the patient complains of severe pain during the puncture, withdraw the needle immediately. The pain should subside as soon as the needle is removed.
 3. Any patient complaint must be documented on a Visitor Incident Report Form (SAFE.GEN.2.3).
 4. Patients who call to complain of pain hours or days after the venipuncture should be referred to their physician for examination of possible damage. This call should be documented on a Patient or Vendor Incident Report.
 5. Send Visitor Incident Report Form to Supervisor.
 6. Supervisor will enter the Visitor Incident Report form in Hc1 to document the patient incident. The type of incident is safety. Document the patient's reaction and whatever actions the associate took.
 7. Supervisor forwards the report form to the Safety Officer.

REFERENCE

- A. Hoeltke, Lynn B., *The Complete Textbook of Phlebotomy*, 2nd Edition, Albany, N. Y., Delmar Publishers, 2000
- B. Clinical and Laboratory Standards Institute (CLSI). *Procedures for the Collection of Diagnostic Blood Specimens by Venipuncture; Approved Standard—Sixth Edition*. CLSI document H3-A6. Clinical and Laboratory Standards Institute; Wayne, PA: 2007.