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PHLEBOTOMY TODAY STAT!

A FREE monthly newsletter for those who perform, teach and supervise blood collection procedures.

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Phlebotomy and the Fainting Patient

During a routine collection, your previously chatty outpatient suddenly becomes quiet and then goes limp in the phlebotomy chair. Are you prepared to respond? With every blood draw comes the potential that the patient will lose consciousness during or following the procedure. For some patients, it's the thought or sight of

blood, or a general anxiety over the procedure that triggers a vasovagal response, also known as “the fainting reflex.”¹ During a fainting reflex, blood vessels dilate causing a drop in blood pressure and blood to pool in the lower parts of the body. Because less blood reaches the brain, fainting may result.¹

Regardless of the cause, studies show that we can expect 2.5 percent of patients to pass out during or immediately after blood collection.² For first-time blood donors weighing between 110 and 139 pounds, the vasovagal reaction rate may be as high as 27 percent.³ And to complicate matters more, an individual’s tendency to faint varies day to day based upon genetic make-up, dietary factors, psychological state, and triggers such as infection, dehydration, and alcohol intake.¹

Be prepared. Anticipating a loss of consciousness means making sure every patient you draw is either lying down or seated in a chair with armrests. Chairs without arms don’t provide adequate support or prevent falls should the patient pass out. Ask patients if they’ve ever had a problem with having their blood drawn. If they’ve experienced an adverse reaction during a previous collection or have a history of passing out, insist that they lie down during the draw. If both urine and blood tests are ordered, send the patient to the restroom first. Following this order of specimen collection eliminates the risk of a patient becoming woozy after the venipuncture and fainting behind closed doors.

Know the warning signs. Individuals who are prone to passing out may experience a range of symptoms, including:^{1,4,5}

- Dizziness
- Palpitations
- Unexplained sweating
- Pallor
- Anxiety
- Shallow or fast breathing



Collectors should anticipate fainting in their patients and be prepared to quickly respond.

- Nausea
- Weakness
- Near fainting
- Fading or blurred vision
- Muffled hearing

Recognize contributing factors. Fainting may occur in at-risk individuals in the following settings:¹

- After maintaining an upright posture for a prolonged period, such as standing in line.
- After being in a warm environment, such as a hot crowded room, taking a hot shower, or during hot weather.
- After emotionally stressful events, such as having blood drawn, or being scared or anxious.
- After eating, due to the body shifting blood to aid digestion.
- Immediately after exercise.

Give priority to patients with a history of fainting. Fending off the fainting reflex in susceptible individuals requires reducing contributing factors and making at-risk patients a high priority in the collection queue. Here's how:^{1,5}

- Keep patient wait times short;
- Encourage patients to stay well hydrated;
- Maintain a comfortable temperature in waiting rooms and phlebotomy areas;
- Have the patient lie down or use a reclining phlebotomy chair during the draw;
- Consider instructing the patient in applied tension techniques.

Studies have shown that applied tension, a technique that raises blood pressure by tightening skeletal muscles, may be useful as a preventive strategy in reducing

anxiety and preventing or reducing vasovagal symptoms in patients predisposed to fainting.⁶ An example of applied tension is having patients cross their legs and stiffen their muscles for at least 30 seconds.⁷ Another procedure recommends instructing the patient to maintain steady breathing while repeatedly tensing and relaxing muscle groups of the arms, torso, and legs (except for the arm used for venipuncture) at 10-second intervals with short pauses in between.⁸

Loss of consciousness. If the patient passes out during the procedure, immediately release the tourniquet, remove the needle, activate the safety feature, and discard the device. Having the presence of mind to protect yourself from the contaminated sharp can prevent an adverse reaction from escalating into an accidental needlestick. Apply pressure to the site and summon first-aid personnel without leaving the patient's side. If possible, provide physical support to the patient and lower the patient's head and arms to promote blood flow to the brain. Avoid the use of ammonia inhalants, as they may trigger respiratory distress in asthmatic patients.⁹

Don't leave the patient unattended. A patient who has fainted should fully recover under supervision before being dismissed from your care. When a patient who has passed out regains consciousness, he/she should remain in the area for a minimum of 15 minutes.¹⁰ Patients who attempt to stand up too quickly may collapse again risking injury. Patients should also be instructed not to drive a vehicle for at least 30 minutes.^{10,11}

Document what happened. It's important that the phlebotomist document the incident according to facility policy, should future legal actions arise. Include a description of the fainting event, any injuries that occurred, immediate steps taken, and instructions provided to the patient to prevent the risk of long-term complications.¹¹

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Ernst, Ballance Appointed to CLSI Committees

Dennis J. Ernst MT(ASCP), Executive Director, Center for Phlebotomy Education, has been named as chairholder for two Clinical and Laboratory Standard Institute (CLSI) document development projects. Ernst will lead committees in the revision of *Procedures for the Collection of Diagnostic Blood Specimens by Venipuncture, Approved Standard (H3)*, and in the creation of a new guidance document, *Essential Elements of a Phlebotomy Training Program*.

The Center's Director of Online Education, Lisa O. Ballance MT(ASCP), CLC(AMT), has been selected as a contributor to CLSI's document development committee in the revision of *Blood Collection on Filter Paper for Newborn Screening Programs; Approved Standard*.

Document development committee members, along with the chairholder have primary responsibility for drafting consensus documents and evaluating and addressing comments received during each phase of CLSI's consensus process. Document development committee contributors are knowledgeable and