

Fainting after vaccination and Phlebotomy – more common than you think!

It is no surprise when a patient feels faint during or after having blood taken, the GP or practice nurse usually manages the situation flawlessly.

The situation can also arise after vaccination, and in the context of large COVID-19 vaccination clinics, it might be time to consider one's preparedness for this eventuality.

At Medisec, we assisted a number of members who experienced a critical incident in the practice, where a patient fainted post-procedure and suffered severe injury as a result. We are aware of events where there have been significant adverse outcomes, but we don't hear about all the faints and "funny turns" where the patient recovers perfectly and suffers no lasting harm, although we are aware that it is a relatively common occurrence. Serious injuries have included loss of front teeth, concussion, fractured vertebrae and serious facial injuries requiring plastic surgery intervention.

Almost every GP has had the following experience: the previously chatty patient goes silent, you are halfway through obtaining a good blood sample, the consulting room door is closed and no one can hear you call for help. You withdraw the needle hurriedly. The patient slumps, slithers off the chair and begins to twitch. While you recognise that it is a vasovagal response, there is always that concern in the back of your mind that this could be an epileptiform seizure. In some cases, the patient faints so suddenly and heavily that serious injury can result. Timing can vary – it can happen during the procedure, or the patient may feel fine until, say, they are waiting to pay at reception, you have already called in your next patient, and then you hear a thump!

COVID-19 vaccination centres are well equipped for the 15/30 minute waiting period post immunisation, where the patient is seated and supervised. In the practice context, it is equally important to ensure that the patient is well supervised post vaccination, just in case of a potential faint, or worse still, anaphylaxis.

As GPs and Practice Nurses, you are so completely in your comfort zone when immunising and taking blood, that you often forget how this is a slightly strange experience for the patient. Some patients will faint at the sight of a needle, never mind while actually having their blood taken. Some will even faint while observing others being vaccinated.

Often the patient is quite happy with the procedure, but will nevertheless feel faint during or sometime afterwards. 1% of all phlebotomy procedures (but more frequently if experiencing phlebotomy for the first time 1.7% versus 0.19%) result in a vasovagal reaction or faintⁱ

Along with the possibility of a sudden faint comes the potential of other injuries when falling – hitting the head, face, teeth, or sustaining other musculoskeletal injuries. It is always useful to enquire initially as to whether the patient has fainted before while having blood taken, and if are they feeling well. Beware of certain patients who may have had a late night the night before – they will already be feeling weak and dehydrated. Be particularly careful taking fasting bloods from this patient– they can still drink water and should be encouraged to do so in order to increase blood volume, make the phlebotomy easier, and may reduce the risk of a vasovagal episodeⁱⁱ. This patient is also the one more likely to faint after a vaccination, and we need to remain aware of these risks as COVID-19 vaccination rolls around to the younger cohorts.

Some tips to reduce the risk of a faint during or after vaccination or phlebotomy:

- Consider the position of the patient prior to undertaking the procedure. It is advisable to place the patient on the examination couch or phlebotomy chair so that in the event of your patient becoming faint they can be gently eased to the supine position and are less likely to sustain an injury. From an infection control perspective, you are also less likely to sustain a needle-stick injury, and your surrounding administration area, desk and keyboard is less likely to become contaminated with micro splashes of blood.
- Make sure help is nearby and preferably within earshot, or have a phone within reach - an unconscious patient is very heavy. Discuss and agree on a strategy within the practice to alert others when an incident arises. This may be using an alarm siren or simply shouting aloud for help.
- If the patient has fainted in the past, ensure they are lying down on the couch for the procedure.
- Whether vaccinating or taking blood, try to keep the patient's sight of the syringe, needle and other equipment to a minimum.
- After phlebotomy, where possible, try to keep the filled bottles out of the patient's view – label them discretely so the patient isn't looking at the blood bottles.
- Ensure patient is well hydrated and has eaten (if not needing fasting blood samples).
- Ensure the patient is not currently ill and dehydrated from any medical condition or a late night of partying!
- Keep an eye on the patient's demeanour while vaccinating or drawing the blood.
- Never turn your back on the patient just after a procedure.
- If a patient is seated on a couch and higher than the clinician, ensure the patient does not lose consciousness and faint on top of the clinician.
- Allow patient adequate time to recover particularly after a blood test and advise they remain seated for a few minutes.
- Enquire as to whether they feel well before allowing them to leave the room. If well, try to ensure that they will not be standing for any length of time after the procedure – e.g. queuing to make another appointment.
- Keep some sweet drinks (not diet drinks) in the practice for revival and rehydration purposes.

What to do if a patient faints:

During the procedure

If a patient becomes faint, immediately terminate the procedure and call for assistance. If the patient is sitting, assist them to place their head between their knees, or if sitting on a couch, assist them to the lying position with the head of the couch flat and no pillow. If they slither to the floor, call for assistance and ensure their airway is clear, elevating their legs to the Trendelenburg position if necessary to increase their core blood supply.

Usually, the patient will recover fairly quickly, but they should remain accompanied until they are feeling completely well again. A sweet drink will often revive them quickly, particularly if they have been fasting.

After the procedure

If the patient states that they feel dizzy after the procedure is completed, attempt if possible, to place them lying on a couch with the bed head flat. They should recover without difficulty after a short time and a sweet drink. Try never to direct the patient elsewhere while experiencing dizziness, they may well faint on the way. Ensure they remain under clinical supervision until fully recovered. There is a dearth of advice regarding how long a patient should wait after phlebotomy before being allowed to leave the premises, but it stands to reason that they should have good colour, vital signs normal and be subjectively well. There are firm guidelines for 15-30 min waiting periods after immunisation, and in particular after COVID-19 immunisation.

Document the Critical Incident

If a patient faints after a procedure, document this well in the patient record and ensure that another clinician would be aware of the patient's tendency to syncope. If the patient suffered any injury no matter how small, document as a critical incident. Undertake a Significant Event Analysis and explore how such an incident could be prevented and managed in the future.

ⁱ WHO guidelines on drawing blood: best practices in phlebotomy 2010

ⁱⁱ Barker, L. J. (2008). Venepuncture Syncope—One Occupational Health Clinic's Experience. *AAOHN Journal*, 56(4), 139–140.

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