

Pathology

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ADVERSE REACTION AFTER BLOOD DONATION IN BLOOD BANK



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**Abstract**

We all know blood donation is one of the most important procedure in the blood bank. As blood is supposed to be the most vital fluid which is required in most of the surgeries, gun shot, stab wound, accidental and anemic patients etc. After a strict pre-donation checkup ensuring the safety of the donor phlebotomist takes out the blood. Most of the times the blood donation procedure comes out perfectly normal, but still at some cases due to various reasons the donor encounters the adverse reactions which can be fatal if not treated properly.

INTRODUCTION

Although the donation process is usually safe and uncomplicated, occasional donor experience adverse reaction from the process. Whenever there is a first sign of donor reaction immediately deflate the blood pressure cuff and withdraw needle.

PURPOSE

Any adverse reaction in the immediate post-donation period requires to be attended with immediate effect.

SCOPE

Management of donor reaction to prevent its deleterious effect & to advice about future blood donations

RESPONSIBILITY

The Consultant in charge of donor complex is responsible for managing the adverse reaction in the donor room. He is the one who gives proper attention and care to the donor and asses the donor reaction and provide proper management

FAINTING OR VASOVAGAL REACTION**Symptom:**

- Mild: Sweating, Weakness, Dizziness, Pallor. The skin of the donor feels cold to the touch due to fall in blood pressure.
- Moderate to Severe: Loss of consciousness, Convulsions and involuntary passage of urine feces.

Management:

- Raise the legs above the level of the donor's head by placing him on his back. Ensure sufficient air way.
- Loosen tight clothing.
- Give inhalation of aromatic spirit of ammonia. The donor should respond by coughing which will elevate the blood pressure.

- Apply cold compresses to donor head
- Check periodically-BP, Pulse and Respiration. If there is bradycardia & hypotension
- administer injection Atropine 1 ml IM, If bradycardia continuous for more than 20 minutes
- Administer IV normal saline or dextrose saline infusion if hypotension is prolonged

NAUSEA AND VOMITING**Management:**

- Make the donor comfortable and relaxed.
- Ask him to breathe slowly and deeply.
- Apply cold compress to the donor forehead and back of neck.
- Turn the donor head to site to avoid aspiration of vomitus.
- If he vomits, provide suitable receptacle and towel or tissue paper.
- Give water to clean/ rinse his/ her mouth.
- If vomiting still persists, give injection stemetil/perinorm.

TWITCHING OR MUSCULAR SPASM

Anxious donor with Hyperventilation may suffer from this type of reaction.

Management:

Ask the donor of breath into paper bag. Do not give oxygen

CONVULSIONS: (OCCURS VERY RARELY)

- Prevent the donor for injuring himself / herself
- Place tongue depressor between the teeth to avoid him from biting the tongue.
- Ensure sufficient airway.

HAEMATOMA**Management:**

- Release the tourniquete / BP cuff pressure immediately.
- Apply pressure on venipuncture site & withdraw the needle from the vein
- Place 3-4 sterile gauge pieces or cotton swabs over the haematoma.
- Raise arm above the heart level.
- Apply Digital Pressure for 7-10 minutes.
- Apply ice to the area for 5 minutes if desired.
- Record nature of reaction and treatment given in donor form.
- Advise the donor to apply topical application of thrombophobe ointment if bruising occurs

SERIOUS CARDIAC PROBLEMS (extremely rare)**Management:**

- Cardiopulmonary resuscitation if the donor is in cardiac arrest.
- Continue the CPR until medical aid arrives.
- Call CODE BLUE TEAM to shift the patient

RECORD

Take the history in detail according to Donor reaction register & maintain the record.

CONCLUSION-

Although the number of donors who developed disturbances during or at the end of blood donations are always very low, it is nevertheless desirable to reduce risks to a minimum. A set of advices is provided for preventing problems.

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