

Blood Withdrawing Techniques

By Assist. Prof. Dr Dler Gallaly

PhD in Medical Physiology 2024 / 2025 Mob.#: (+964) 750 461 87 58 Email: dler.qader@tiu.edu.iq



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Blood withdrawing and Cannulation:

Aim of the experiment:

- To study the different methods of:
- ✓ Blood collection and administrations of drug and fluid

Apparatus Required:

- Sterile lancet,
- Disposable syringe and needle
- Anticoagulant container,
- Cotton,
- Spirit (alcohol).



Blood withdrawing: Procedure:

Collection of Capillary Blood:

Finger Prick Method:

- 1. Clean the tip of the finger with a cotton swab dipped in spirit.
- 2. Allow the finger tip to dry (to prevent **hemolysis** and **pain**).
- 3. Using a sterile lancet prick the finger deep enough to ensure a free flow of blood.
- 4. Wipe out the first few drops and collect the sample when the blood is flowing spontaneously.
- Do not squeeze the finger as tissue fluid can mix with blood and may cause error.

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Blood withdrawing: Procedure:

Collection of Venous Blood:

- Venous blood is usually collected from antecubital vein.
- Clean the antecubital fossa with spirit and allow it to dry.
- After applying a tourniquet around the upper arm, introduce a needle under the skin and then puncture the vein from the side.

During this procedure, open and close the fist repeatedly so that the vein gets engorged.

Blood withdrawing: Procedure:

Collection of Venous Blood: Cont....

- When the blood flows into the syringe, release the tourniquet and draw the required amount of blood.
- Withdraw the needle and apply a cotton swab over the site of puncture and apply pressure till

the bleeding stops.





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Blood withdrawing: Procedure:

Collection of Venous Blood: Cont....

- To prepare <u>serum</u>, blood can be emptied into a container without anticoagulant.
- To prepare <u>plasma</u>, blood has to be emptied into a container with anticoagulant.



Take into account:

- Open the lancet carefully and place it on a clean surface. Do not touch the tip of lancet.
- Wipe out the tip of your middle or ring finger with the spirit and allow the spirit to evaporate by itself. Do not blow to dry.
- Support the finger by applying a gentle pressure on the sides with your thumb and index finger. Do not touch the pricking area.



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Take into account:

- Prick the finger with lancet in a single attempt to a depth of ~3-4mm.
- Allow the blood to flow spontaneously (Do not squeeze the finger).
- Wipe out the first 2 drops of blood with sterile gauze.
- Allow a fresh drop to form and use it for the given experiment.



