

**Aim:** General techniques for the collection of blood

**PRINCIPLE:** Blood collection is a method of withdrawing blood from the subject. It includes two methods:

1. Capillary blood collection and
2. Venous blood collection.

These are common methods for the collection of blood samples for hematological study. The capillary method collects blood from the fingertip by puncturing the skin. In the venous blood collection method, blood is taken from the venous vein of the arm with the help of a sterilized syringe.

### **CAPILLARY BLOOD COLLECTION**

Blood is obtained from the fingertips by puncturing the lateral side of the tip with a needle or lancet. It collects small quantities of blood specimens for making blood smears, cell counts, and hematocrit pack cell volume (PCV).

#### **Material Required**

- Capillary tube
- Sterilized Gloves
- Disposable sterile lancet
- 70% alcohol
- Bandage and cotton
- Disposal containers

#### **Procedure**

1. Wear sterilized gloves and select the fingertip of the subject suitable for puncture.
2. Clean the fingertip's skin with 70% alcohol using sterile cotton and allow it to dry.
3. Hold the finger firmly and make a quick puncture on the selected site with the help of a sterilized lancet to obtain a good flow of blood.

4. Wipe the first drop of blood using sterile cotton, as it may be contaminated with tissue fluid or debris.
5. Allow the blood to flow out slowly from the puncture site.
6. Rapidly collect the blood with the capillary tube and use the blood sample immediately for laboratory study.
7. After collecting a blood sample, give the person sterile dry cotton to hold over the puncture site until the bleeding stops.
8. Remove gloves and wash hands.

### **Precautions**

1. Always wear a lab coat and gloves while collecting blood samples.
2. Do not squeeze the puncture site too tightly, as this can dilute the sample.
3. Avoid touching blood specimens and the puncture site.
4. Puncture depth should be less than 1.5mm.
5. Use the middle or ring finger of the hand for capillary blood collection.
6. Never touch the tip of the lancet.
7. Always use disposable gloves and disposable lancet.