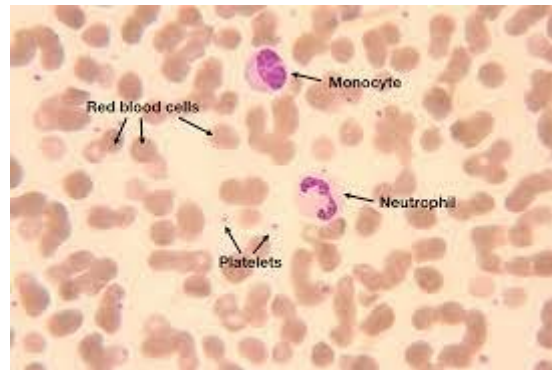


A **blood smear**, **peripheral blood smear** or **blood film** is a thin layer of **blood** smeared on a glass microscope slide and then stained in such a way as to allow the various blood cells to be examined microscopically



Purpose of the test

A blood smear is used to evaluate your red blood cells (RBCs), noting any abnormal differences in size, shape, or other physical appearances such as that seen in various anemias, sickle cell disease, Thalassemia, or other disorders.

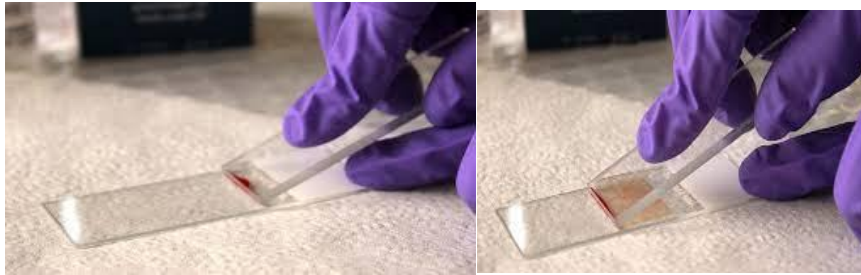
Preparation

1-A blood smear is made by placing a drop of blood on one end of a slide



A blood sample is drawn from a vein in your arm or by pricking a finger (or using a heel stick if an infant)

2- using a *spreader slide* to disperse the blood over the slide's length



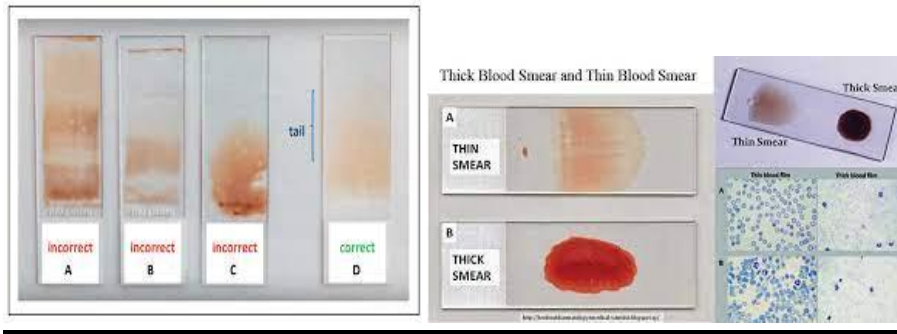
. The aim is to get a region, called a monolayer, where the cells are spaced far enough apart to be counted and differentiated. The monolayer is found in the "feathered edge" created by the spreader slide as it draws the blood forward

3-The slide is left to air dry

4-the blood is fixed to the slide by immersing it briefly in methanol. The fixative is essential for good staining and presentation of cellular detail.

5-After fixation, the slide is stained to distinguish the cells from each other such as Wright's stain, Giemsa stain.

. These stains allow for the detection of white blood cell, red blood cell, and platelet abnormalities



Importance of the test

If your complete blood count (CBC) and/or automated WBC differential results are abnormal, you should get a blood smear,. Also, take this test when you have signs and symptoms that a health care practitioner suspects are due to a condition affecting your blood cells. These symptoms may include:

-
- Bone pain
-
- Fatigue or weakness
 - Fever or chills
 - Jaundice (yellowing of the skin and eyes)
 - Pale skin
 - Unusual bleeding (including nose bleeds)
 - Losing weight
 - Swollen glands (lymph nodes)
-