D. PH 1ST YEAR: HUMAN ANATOMY AND PHYSIOLOGY – PRACTICAL

EXPERIMENT NO.: 5. d DATE:

AIM: TO STUDY AND DETERMINATION OF THE BLEEDING TIME OF OWN BLOOD SAMPLE.

REQUIRMENTS:



PRINCIPLE:

- A bleeding time test determines how quickly your blood clots to stop bleeding. The test involves making small punctures in your ring finger.
- The test is a basic assessment of how well your blood platelets work to form clots.
- Platelets are tiny cell fragments that circulate in your blood. They're the first cells to react to a blood vessel injury. They seal off the wound to prevent more blood from escaping.
- Abnormal results from a bleeding time test can be a sign platelet function defect.

THEORY

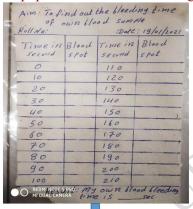
- The time required for complete stopping of blood flow from the punctured blood vessels called the **bleeding time.**
- Normally it is 1-3 minutes for a normal human's blood.
- Normal clotting time and bleeding time values differ because bleeding time is the time for stopping bleeding by the formation of fibrin network on the surface of punctured skin known as surface phenomenon.

D. PH 1ST YEAR: HUMAN ANATOMY AND PHYSIOLOGY – PRACTICAL

- But the clotting time is the time for clotting the whole blood, collected in the capillary tube; therefore it is a volume phenomenon.
- For this reason clotting time is more than the bleeding time, when determining by conventional methods.

PROCEDURE:

Write the aim, date and roll number on piece of filter paper and draw the pattern to take result on filter paper as shown in below figure



Take a new or unused Lancet/Pricking Needle and Sterilize it with 70 % of alcohol

Sterilize the tip of ring finger with 70% of alcohol

Rub the finger to increase the blood circulation then hold the finger using your thumb

Give the sharp Prick by the lancet on the tip of ring finger

Star to take result on filter paper at 10 sec interval, Take first result at 0 Second time means immediately after pricking, then at 10 Sec, 20 Sec, 30 Sec

Take the response till no blot appears on filter paper

Time from first appearance of the blood spot to no blot appears is your bleeding time

Normal Bleeding time of healthy person is 1-3 Minutes

Why We Use Left Hand Ring Finger ????

- It is least used as compared to other finger
- Synovial sheath of ring finger short of the hand and due to this infection do not spread exceed to their limit.

D. PH 1ST YEAR: HUMAN ANATOMY AND PHYSIOLOGY – PRACTICAL

RESULTS

Bleeding time of my own blood is _____ minute ____ Seconds.

PRECAUTION

Following precautions should be enforced

- i) Needle should be sterilized.
- ii) A faint stain of blood should not be avoided.
- iii) Time should be noted properly.
- iv) Use fresh needle every time for the practical

CONCLUSION

My own blood bleeding time is _____ which lie in normal/abnormal range.

CLINICAL SIGNIFICANCE

- To study the hemorrhagic disorders.
- To study the coagulation defects
- To have an idea about the platelets count of the patient.
- Bleeding time is prolonged in few disorders like: vascular lesions, platelet defect, severe liver disease, uremia and anti-coagulant drug administration.

SIGNATURE OF TEACHER