



HEALTH HOLDING

HAFER ALBATIN HEALTH  
CLUSTER  
MATERNITY AND  
CHILDREN HOSPITAL

<b>Department:</b>	Laboratory and Blood Bank ( Haematology)		
<b>Document:</b>	Internal Policy and Procedure		
<b>Title:</b>	Basic Performance for Performing Bleeding Time		
<b>Applies To:</b>	All Laboratory Staff		
<b>Preparation Date:</b>	January 07, 2025	<b>Index No:</b>	LB-IPP-063
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## 1. PURPOSE:

- 1.1 Determination of the bleeding time is important as preparation evaluation investigations.
- 1.2 Establish system & set responsibilities for the work.
- 1.3 Elucidating the procedure of bleeding time test as a screening test for determination of platelets function.

## 2. DEFINITONS:

N/A

## 3. POLICY:

- 3.1 The Thrombosis Homeostasis Advisory Group recommends that bleeding times have a limited clinical utility, but in specific circumstances, such as von Willebrand's Disease, the bleeding time is still indicated
- 3.2 The procedure of bleeding time test as a screening test for determination of platelets function.
- 3.3 The manual way of evaluating the bleeding time.

## 4. PROCEDURE:

- 4.1 Specimen
  - 4.1.1 Blood collected by Puncture.
- 4.2 Normal Range :
  - 4.2.1 Adult : 1 – 5 minutes.
- 4.3 Procedure:
  - 4.3.1 Place the sphygmomanometer cuff around the patients arm above the elbow, inflate to 40 mmHg and keep it at this pressure throughout the test.
  - 4.3.2 Clean the area of the forearm to be used with alcohol swab. Choose an area that is devoid of visible veins.
  - 4.3.3 Using a clean and sterile lancet, make two separate punctures about 3-5 cm apart. Start stopwatch.
  - 4.3.4 When bleeding has ceased, note time and apply band aid to punctures
  - 4.3.5 Average duplicate result and report in minutes and seconds
  - 4.3.6 Normal range:
    - 4.3.6.1 Children: 1-8 minutes.
    - 4.3.6.2 Adult; 1-6 minutes
  - 4.3.7 Interpretation the results: A prolonged bleeding time may be due to
    - 4.3.7.1 Thrombocytopenia.
    - 4.3.7.2 Disorder of platelets function
    - 4.3.7.3 Von willebrands disease due to defective platelet adherence to the sub endothelium in the absence von willebrand factor.
    - 4.3.7.4 Vascular abnormalities



- 4.3.7.5 Chemical interferences and in vivo effects: V Aspirin, alcohol, allopurinol, some antibiotics, anticoagulants, asparaginase, dextran, diltiazem hydrochloride, halothane, nifedipine, nonsteroidal anti-inflammatory drugs, propranolol, streptokinase and urokinase, and valproic acid Desmopressin, epoetin (erythropoetin)
- 4.3.8 Limitations Of The Procedure:
  - 4.3.8.1 If thrombocytopenia is present, the bleeding time may be prolonged.
  - 4.3.8.2 Patient should not take aspirin or drugs affecting platelet function one week prior to testing.
- 4.3.9 Application Of Bleeding Time Test:
  - 4.3.9.1 Screening test for platelet disorders and in the prediction of the risk of bleeding in various hemorrhagic states.
  - 4.3.9.2 Monitoring the antithrombotic effect of drugs which impair platelet function
  - 4.3.9.3 Monitoring the effect of platelet transfusions in thrombocytopenic subjects

## **5. MATERIALS AND EQUIPMENT:**

- 5.1 Sphygmomanometer Cuff
- 5.2 Alcohol Swab
- 5.3 Sterile Lancet
- 5.4 Filter Paper
- 5.5 Stopwatch.

## **6. RESPONSIBILITIES:**

- 6.1 The assigned technician.  
The BT is subject to many variables (constant blood pressure, length of incision, blotting technique). Only experienced individuals should perform the test; ideally the same individual/team should do the test for consistency






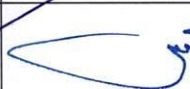
## **7. APPENDICES:**

N/A

## **8. REFERENCES:**

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- 8.2 Clinical Guide to Laboratory Tests;NW Tietz,2ndedition 1990(94).
- 8.3 Lewis SM, Bain BJ, Bates I, editors: Dacie and Lewis practical hematology, ed 9, Edinburgh, 2001, Churchill Livingstone
- 8.4 Jacobs DS, Demott WR, Oxley DK, editors: Laboratory test handbook, ed 5, Hudson, OH, 2001, Lexi Comp, Inc.
- 8.5 Rodgers RP, Levin J: A critical reappraisal of the bleeding time, Semin Thromb Hemost 16:1-20, 1990
- 8.6 Peterson P, Hayes TE, Arkin CF, et al: The preoperative bleeding time test lacks clinical benefit, Arch Surg
- 8.7 A Manual Laboratory & Diagnostic Tests ( Lippincott Williams & Wilkins)
- 8.8 Medical Encyclopedia ( Medlin Plus )
- 8.9 Clinical Laboratory Methods/ John D. Bauer – MD- Mosby
- 8.10 Practical Hematology ( Sir John V. Dacie)

## 9. APPROVALS:

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