Bleeding Time – [Whole Blood] Analysis

Objective

The objective of this test is to determine the bleeding time using whole blood. Bleeding time measures platelet function and vascular integrity and is used to evaluate bleeding disorders, platelet dysfunction, and von Willebrand disease.

Materials and Methods

Materials:
- Whole blood from patient (finger prick or earlobe puncture)
- Stopwatch
- Filter paper or blotting paper
- Sterile lancet and antiseptic swabs

Methods:
1. Preparation: Clean puncture site (finger or earlobe) with antiseptic.
2. Puncture: Perform a standardized skin puncture using a sterile lancet.
3. Timing: Start stopwatch and blot blood at 30-second intervals until bleeding stops.
4. Interpretation: Compare measured time with reference range to assess platelet function.
5. Safety: Apply pressure and antiseptic after test to prevent infection.

Results

- Normal bleeding time: 2–7 minutes (varies with method)
- Prolonged bleeding time: Indicates platelet dysfunction, thrombocytopenia, or von Willebrand disease
- Shortened bleeding time: Rare, generally clinically insignificant

Conclusion

Bleeding time is a simple bedside test for assessing primary hemostasis and platelet function. Prolonged results require further evaluation with platelet count, clotting factor assays, and von Willebrand factor studies for definitive diagnosis.