Bleeding Time and Clotting Time Study

Experiment 14 - Practical Notes

Name: _____ Roll no.: _____ Date: _____

Aim

To distinguish primary haemostasis from clot formation and calculate intervals using a supervised demonstration or simulation.

Principle

Bleeding time is the interval until bleeding stops under a specified test method and is influenced by platelet and small-vessel function. Whole-blood clotting time records a method-specific clot endpoint and relates more to coagulation. These historical teaching tests are not interchangeable with modern platelet studies, PT or aPTT; bleeding time is rarely used clinically today.

Requirements

- Instructor-selected video, simulated timing record or approved demonstration.
- Timer, endpoint descriptions and observation sheet.
- Any invasive demonstration is conducted only by authorised trained staff under institutional procedures.

Procedure

1. Identify the method

Record whether the demonstration concerns bleeding time or clotting time. Note the named method, time-zero definition and endpoint.

2. Observe bleeding endpoint

In a simulation or authorised demonstration, record the start and the first endpoint meeting the stated method. Do not carry out cuts or punctures on classmates.

3. Observe clot endpoint

Record when the stated clot criterion is reached and the conditions shown, including temperature where relevant.

4. Calculate intervals

Subtract the starting timestamp from each endpoint. Write both minutes and seconds; a decimal minute is not the same as a minute:second notation.

5. Discuss limitations

Compare the recorded interval with the method-specific laboratory interval. Discuss observer dependence and why modern investigations may be preferred.

Observations and Record

Test	Start / endpoint	Elapsed interval
Bleeding-time simulation	____ / ____	____ min ____ s
Clotting-time simulation	____ / ____	____ min ____ s
Method / conditions	_____	_____

Worked Example

The numbers below are illustrative; enter your own observations in the record.

- Illustrative bleeding record: start 09:02:00; endpoint 09:05:30. Interval = 3 min 30 s = 3.5 min.
- Illustrative clotting record: start 09:10:00; endpoint 09:14:45. Interval = 4 min 45 s = 4.75 min.
- These times demonstrate arithmetic and are not patient findings or universal normal limits.

Result

Bleeding-time simulation: ____ min ____ s. Clotting-time simulation: ____ min ____ s. Method-specific limitations were identified.

Precautions

- Use the approved simulation rather than student self-puncture or improvised cuts.
- Do not stop medicines or infer a bleeding disorder from a classroom timing result.
- Test conditions and endpoint definitions must be recorded; different methods cannot be compared by one universal cutoff.

Viva Questions and Answers

1. Which process is especially relevant to bleeding time?

Primary haemostasis involving platelets and small vessels.

2. Are clotting time and aPTT the same?

No; they have different procedures and endpoints.

3. Why is bleeding time uncommon today?

It is difficult to perform reproducibly and more suitable investigations are available.

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