First Hope

PRACTICAL NOTES

Click here to visit our website

FIRSTHOPE / MBBS

MBBS Practical Notes

From first-year laboratory work to final-year clinical stations.

FIRST YEAR / SECOND YEAR / THIRD YEAR / FINAL YEAR

Get the FirstHope app

Explore study resources in the app.

Click here to get the app >

Scan or click here

FirstHope MBBS

firsthope.co.in/mbbs/

Click here to explore MBBS >

Identification Age Estimation and Skeletal Spotters

Practical 04 / Spotter and viva

Aim

Document observations relevant to age or identity using supplied anonymised records and replica specimens.

Principle

Age estimation uses several indicators and their uncertainty. Bone development and dental milestones vary among individuals and populations. Skeletal identification is multidisciplinary.

Materials and Requirements

- Skeletal replicas and authorised dental or maturation teaching images
- Fictional age-assessment request
- Locally adopted reference chart

Procedure

1. Record who requested the assessment and collect supplied documentary evidence and history.
2. Verify the reference method and the supplied source of age or identity information. Use a fictional case code and note information that comes from documentation or observer report.
3. Identify bone, side and developmental markers. For a fetal or skeletal teaching record document the method and measurements provided.

Continue with step 4 on the next page.

Procedure Continued

Identification Age Estimation and Skeletal Spotters

4. On dry replicas and supplied films orient and identify the structure before reading fusion or development. Locate the matching projection and record open, partially fused or fused features where interpretable.
5. For a supplied measurement confirm the scale, unit and anatomical landmarks. Take two independent readings on the replica or image when feasible and investigate disagreement before averaging.
6. Compare independent indicators with the adopted reference and explain variation or conflicting findings.
7. Compare the findings with an age-appropriate reference population and state the expected range. Identify how image quality, developmental variation or missing records affect precision.
8. Write an estimated range and confidence limits where supported and state why definitive individual identification needs additional evidence.
9. Report the finding, reference, estimated range and limitations in separate fields. Identify any additional documentary or specialist evidence necessary for an individual identification decision.

Precautions

- Use approved images and consent procedures. Do not arrange radiation solely for a student exercise.
- Protect identities and avoid unsupported ancestry or identity claims.

Observations and Interpretation

Identification Age Estimation and Skeletal Spotters

Observations and Record

Item	What to record	What it tells you
Evidence source	Document, dental or skeletal feature	Distinguishes provenance
Measurement	Method and units	Supports repeatability
Conclusion	Estimated range and uncertainty	Avoids unjustified precision

Worked Example

In a training case, dental appearance and bone maturation are consistent with overlapping ranges. Give the evidence and range rather than treating the mean of the two as an exact birthday.

Result and Interpretation

Present the range, reference population and method limits.

Viva Questions and Answers

Why indicate a range?

Biological development varies and methods have limited precision.

Is a bone tag enough for individual identification?

Individual identification requires corroboration by authorised evidence.

First Hope

PRACTICAL NOTES

Click here to visit our website

FIRSTHOPE / MBBS

MBBS Practical Notes

From first-year laboratory work to final-year clinical stations.

FIRST YEAR / SECOND YEAR / THIRD YEAR / FINAL YEAR

Get the FirstHope app

Explore study resources in the app.

Click here to get the app >

Scan or click here

FirstHope MBBS

firsthope.co.in/mbbs/

Click here to explore MBBS >