Forensic Medicine and Toxicology - Topic 14 - Skills in forensic medicine & toxicology

A Common Method for Practical Stations



Preparation and Professional Conduct

Identity, Consent and Immediate Priorities

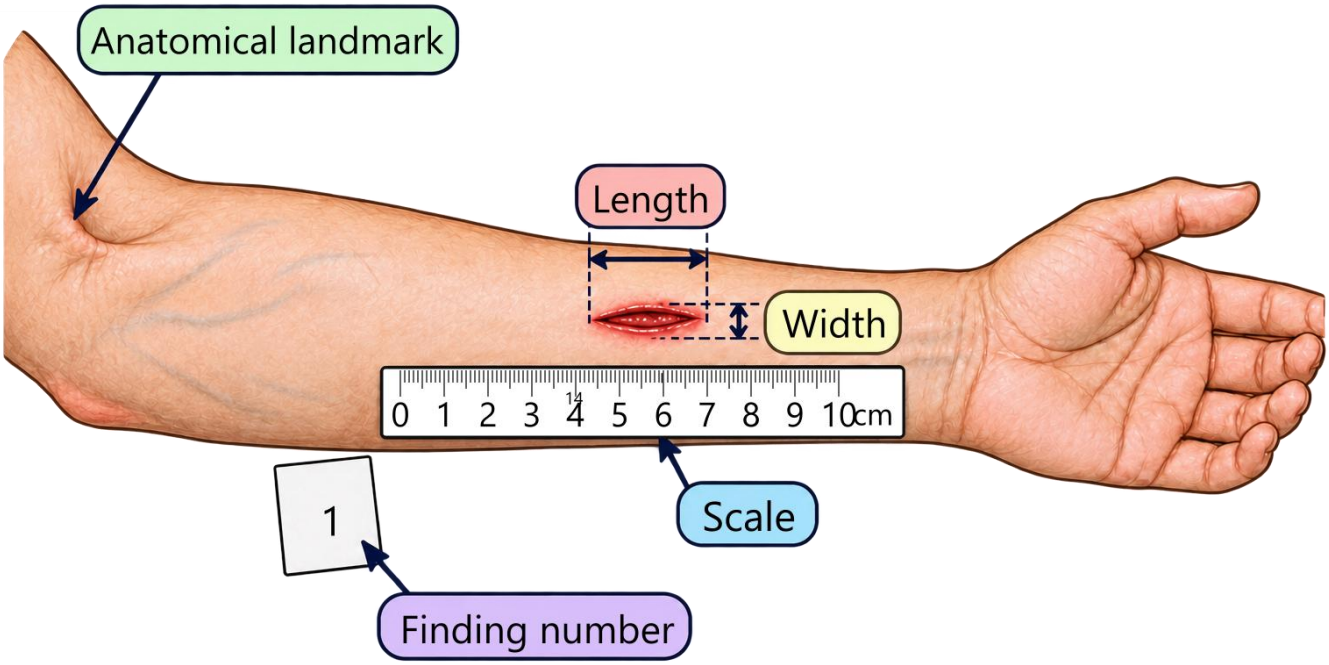
- Confirm the identity of the person or exhibit, the referral question and the legal authority before beginning a medico-legal assessment.
- Introduce yourself, explain the procedure, obtain the relevant consent and provide privacy and an appropriate chaperone or support person.
- Treat urgent illness or injury before completing a detailed forensic record.
- Use appropriate protective equipment and maintain an accurate date and time record.

Objective Reporting and Record Preservation

- In a simulated station, describe the action you would perform and the finding supplied rather than pretending that an unperformed examination was completed.
- Separate the history provided, your observations, investigation results and the final opinion.
- State the reason for a provisional conclusion and identify the result or follow-up needed to complete it.
- Sign, date and identify the report clearly, including the required registration particulars and enclosure list.
- Preserve the original report and supporting records securely, and document any authorised release or later amendment.

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Injury Examination and Wound Certificate



The dimensions recorded during wound examination

Examination Sequence

Identity and General Assessment

- Record the person's identity, the accompanying officer or other person, consent, alleged event and examination time.
- Document general condition, vital signs and the relevant clinical examination before describing each injury.

Injury Description, Measurement and Care

- Number injuries consistently and describe type, anatomical site, size, shape, margins and associated findings.
- Measure the length and width with a scale in the same plane and relate the site to a fixed anatomical landmark.
- Do not probe a living person's wound blindly to determine depth or direction.
- Describe tenderness, functional loss, neurological or vascular findings and the investigations requested.
- Record treatment and referral separately from the medico-legal opinion.

Interpretation and Worked Example

- For a clean-edged forearm wound, the preliminary opinion may describe an incised wound compatible with a sharp-edged object.
- The appearance does not uniquely identify the object, establish intention or reliably determine an exact injury time.

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- If fracture or tendon injury remains possible, reserve the final nature-of-injury opinion until the relevant investigation or specialist assessment is available.
- For grievous hurt, identify the actual **BNS section 116 category** supported by the findings rather than labelling an injury grievous because it looks large.
- An old wound may still have important functional consequences, so assess function as well as appearance.

Worked Wound-certificate Wording

A. Observed Findings

- A suitable description is: A 3 cm × 0.4 cm clean-edged wound is present on the front of the left forearm, 6 cm proximal to the wrist crease.
- The depth is not probed at bedside, and tendon, nerve and vascular assessment is recorded separately.

B. Provisional Opinion

- A suitable preliminary opinion is: The observed wound is compatible with injury by a sharp-edged object.
- The final legal nature is reserved pending the indicated imaging or specialist findings when those findings could change the classification.
- Do not copy these dimensions into an actual certificate; use the measurements observed in the individual case.

Suspected Poisoning Examination and Exhibits

Clinical Station

Stabilisation and Clinical Assessment

- Begin with airway, breathing, circulation, consciousness, temperature and bedside glucose assessment.
- Record the suspected substance, source, route, time, possible quantity, symptoms and treatment already given.
- Look for a toxidrome and consider trauma, metabolic disease and other causes of altered consciousness.

Investigations and Treatment

- Request an ECG, targeted laboratory tests and specific concentrations when these will guide care.
- Document supportive treatment, antidotes, observation and referral without waiting for a comprehensive toxicology result.

Medico-legal Notification

- Inform police and create the medico-legal record according to the circumstances and applicable duty.

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Collection and Dispatch Station

Selecting and Collecting Exhibits

- Identify the test required before selecting the container, preservative and specimen.
- Collect blood, urine or other material at the indicated time and record whether it was obtained before or after treatment.
- Preserve relevant containers, tablets, clothing or vomitus separately using precautions appropriate to the suspected substance.
- Do not taste or directly smell an unidentified exhibit to identify it.

Labelling, Transfer and Laboratory Instructions

- Label and seal every exhibit, prepare a specimen seal and document each transfer.
- The forwarding letter states the clinical history, suspected agent, treatment, specimen details and the exact tests requested.
- Use the laboratory's requirements rather than a single universal preservative for every poison.

Age Estimation and Certification

Living Person

Legal Purpose, Records and Examination

- Establish the legal purpose because the relevant age threshold and documentary requirements depend on the proceeding.
- Review authentic records before arranging medical age estimation when the applicable law gives those records priority.
- Record consent, identity, general development, dental findings and any indicated skeletal imaging.
- Use radiology only when justified and with suitable attention to radiation exposure and the person's circumstances.

Interpreting and Reporting an Age Range

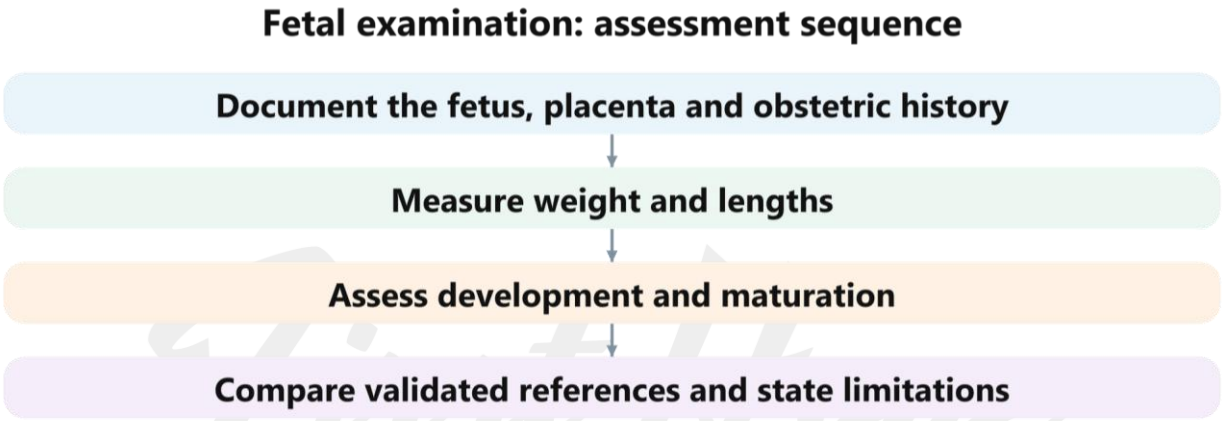
- Interpret teeth and skeletal maturation with validated population data and biological variability.
- State an **estimated range** with reasons and limitations rather than converting a variable finding into an exact birthday.
- For example, an estimate spanning a legal threshold should be reported honestly rather than rounded to favour one party.

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Worked Age-opinion Reasoning

- Suppose authenticated documentary evidence is unavailable and the authorised assessment yields a range of 17–19 years.
- The report should state that range, identify the dental and skeletal methods used and explain their uncertainty.
- It should not certify the person as definitely 18 years old simply by taking the midpoint.
- The competent authority applies the legal standard to the evidence, including the relevant statutory protection.
- The report records the actual date and time of examination because the legal question may concern a different earlier date.

Fetal Examination



- Document the fetus and placenta as received and record relevant obstetric history and available imaging.
- Measure weight, crown–rump or crown–heel length and foot length using the appropriate method.
- Assess external development, organ maturation and relevant ossification centres alongside those measurements.
- Use validated growth references and distinguish gestational age from postnatal survival time.
- Maceration, growth restriction and congenital disease may affect interpretation.
- Do not use the presence of one ossification centre or lung flotation alone to establish a precise age or live birth.

Medical Certification of Cause of Death

Completing the Certificate

- Confirm death, identity and whether the circumstances require medico-legal investigation before issuing a cause-of-death certificate.
- Use the relevant **Form 4 or Form 4A** and record the causal sequence in Part I.

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