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Gross Specimen and Histopathology Spotter Method

Practical 01 / Spotter and viva

Aim

Describe a gross specimen or prepared slide using reproducible morphology and justify a likely process.

Principle

Gross and microscopic patterns complement each other. Architecture, distribution and cell changes support interpretation more reliably than colour alone.

Materials and Requirements

- Fixed specimens or de-identified images
- Prepared slides or digital fields
- Ruler and morphology worksheet

Procedure

1. Confirm organ orientation and describe size, external surface and cut surface using supplied measurements.
2. Start with the container or image label, clinical site and specimen type. Place the organ in its natural orientation and verify anterior, posterior and relevant margins with a labelled model.
3. Locate and describe lesions by number, border, colour, distribution and relation to adjacent structures.
4. Measure the teaching lesion in two dimensions using the scale. Describe the cut surface, border and nearby normal tissue and indicate whether the pattern is focal, multifocal or diffuse.

Continue with step 5 on the next page.

Procedure Continued

Gross Specimen and Histopathology Spotter Method

5. At low power assess architecture and at higher power identify key cells, necrosis, inflammation or atypia.
6. Scan the prepared section from normal into abnormal tissue at low power. Select a representative transition zone and note whether the normal architecture is preserved, replaced or distorted.
7. Use higher power to describe cell arrangement, nuclear features, inflammatory composition or necrosis where relevant. Compare a second field before making a provisional identification.
8. Give a provisional interpretation, differential and the finding that most strongly distinguishes the possibilities.
9. Present gross description, microscopic pattern and likely interpretation separately. Point to two discriminating features and document section quality or clinical information that limits confidence.

Precautions

- Handle preserved material under department rules.
- Do not assign clinical stage or cause from one gross view.

Observations and Interpretation

Gross Specimen and Histopathology Spotter Method

Observations and Record

Item	What to record	What it tells you
Gross description	Organ, location and lesion measurements	Establishes objective morphology
Microscopy	Architecture and dominant cell or tissue changes	Supports an underlying process
Interpretation	Likely process and a discriminator	Links morphology to case data

Worked Example

A supplied pale wedge-shaped renal lesion with its base at the cortical surface and microscopic coagulative necrosis supports infarction in the appropriate context.

Result and Interpretation

Give the specimen identification and two visible supporting features before stating the likely diagnosis.

Viva Questions and Answers

What is a useful first step at low power?

Assess overall architecture and locate a representative lesion.

Why describe the lesion before naming it?

The observation can be verified even if the diagnosis remains uncertain.

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