

TUMORAL BONE RESECTION

1. Received labelled as X is a bone resection specimen weighing X g and measuring XXX cm // for orientation, the specimen is marked with X at the X margin // with attached skin / soft tissue / muscle / fascia measuring XXX cm.
2. Externally, no other remarkable features are identified // within the bony cortex / skin / muscle there is an X lesion measuring XXX cm, located X cm from the closest margin.
3. Margins are inked: X surface in X colour.
4. On serial sectioning, a lesion measuring XXX cm is identified, located X from the margin. The lesion is brownish / whitish, with a firm / soft-elastic consistency and a smooth / irregular surface.
5. On cut section, the lesion does not infiltrate / appears to infiltrate the bony cortex and shows a cavitory / necrotic / haemorrhagic / myxoid appearance.
6. Decalcification is performed in X at X%.
7. Representative sections are submitted as follows:

1st Example (Tibial Plateau Osteosarcoma)

- A1: diaphyseal / distal surgical margin.
- A2–A5: central section of the lesion.
- A6: additional section of the lesion in relation to the epiphyseal margin / soft tissues.
- A7–A9: additional sections in relation to the radial margin.

2nd Example (Epiphyseal Osteosarcoma)

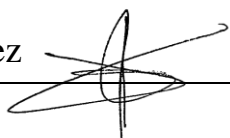
- A1: diaphyseal / distal surgical margin.
- A2–A5: central section of the lesion.
- A6: additional section of the lesion in relation to the epiphyseal margin / soft tissues.
- A7: sections in relation to the radial margin.
- A8–A9: additional sections in relation to the soft tissue / radial margin.

3rd Example (Metaphyseal / Diaphyseal Osteosarcoma)

- A1: diaphyseal / distal surgical margin.
- A2–A7: central section of the lesion.
- A8–A10: lesion in relation to the anterior margin / soft tissues.
- A11–A13: lesion in relation to the posterior margin / soft tissues.

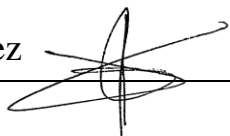
4th Example (Metastasis in Femoral Head)

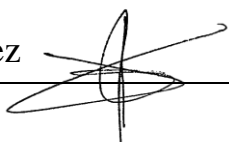
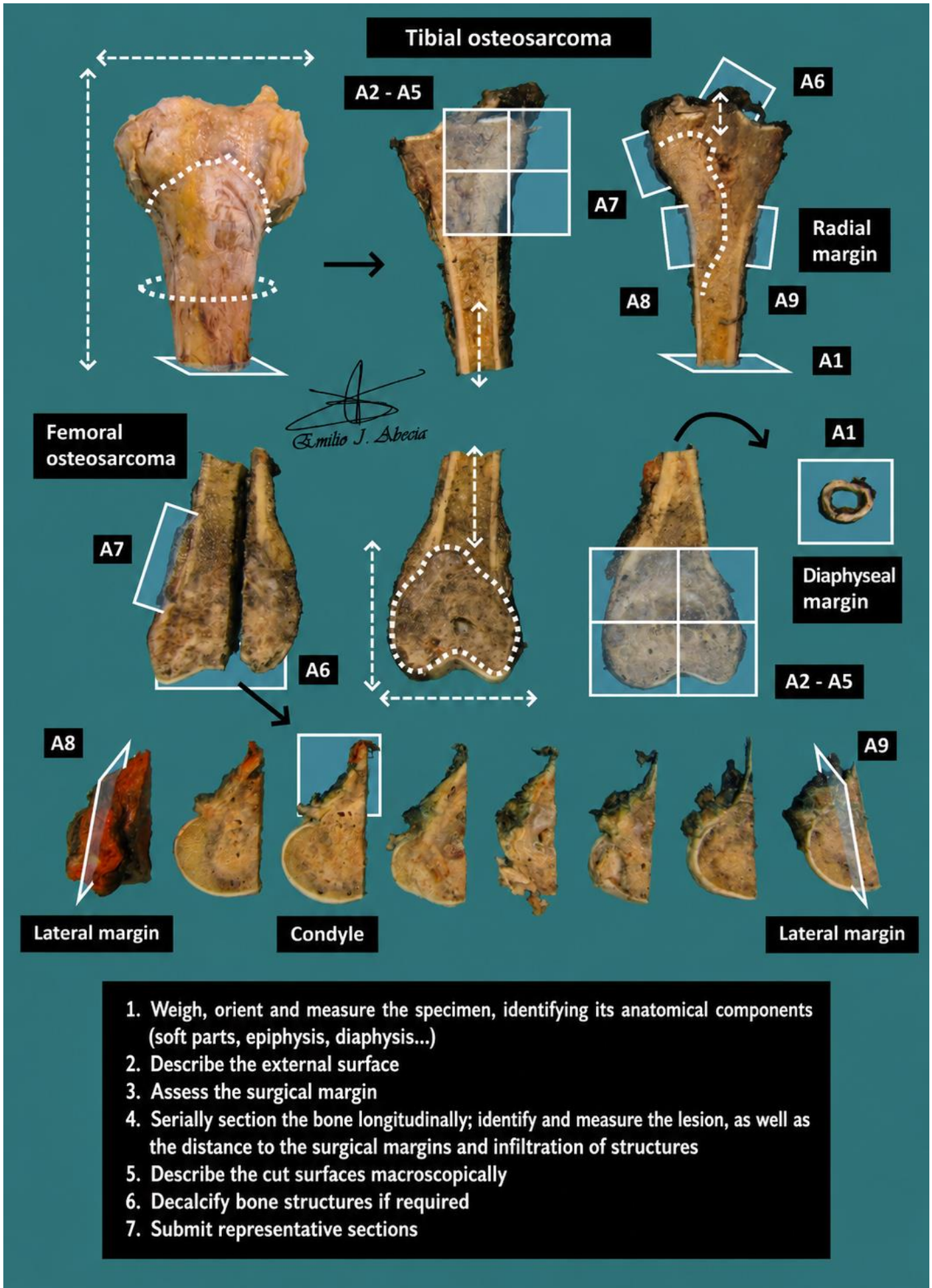
- A1: distal surgical margin.
- A2: lateral margin en face.
- A3: contralateral margin en face.
- A4–A7: complete section of the lesion.

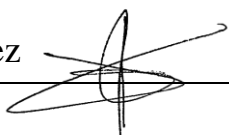
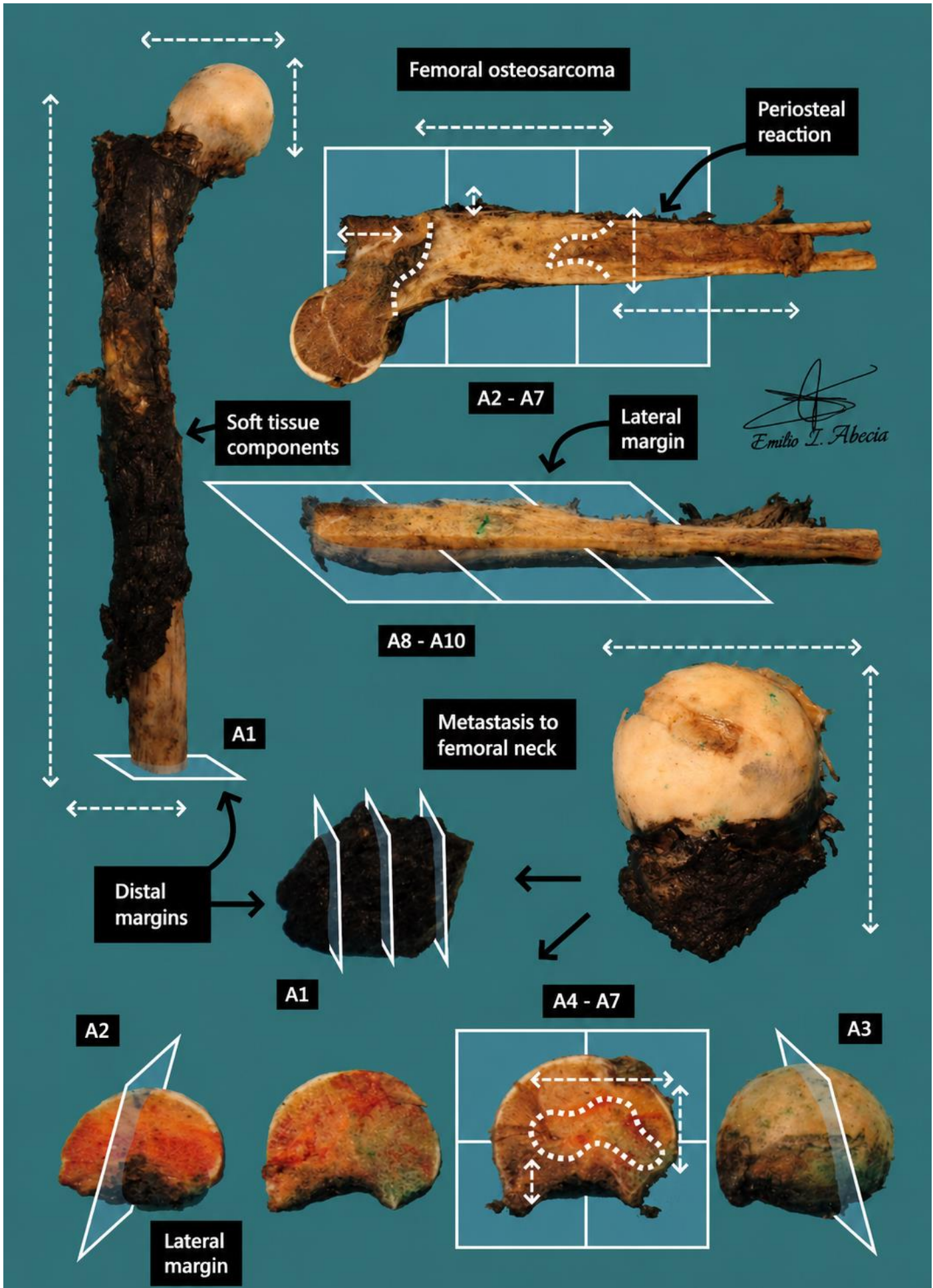


TO CONSIDER

- Extensive and aggressive bone resections performed for primary sarcomatous neoplasms of osseous origin or peripheral soft tissue origin.
- Review clinical reports and imaging studies prior to dissection in order to determine the surgical indication and lesion location.
- Document the specimen photographically.
- Measure, describe, and ink the surgical margins. Record the presence of additional non-osseous tissues, such as soft tissue or muscle, and ink these as well.
- Saw bone specimens along the longitudinal axis, identify and measure the lesion (epiphysis vs metaphysis vs diaphysis vs soft tissues). Indicate the presence of prosthetic or surgical material.
- If the specimen appears insufficiently fixed after sectioning, leave in formalin before manipulating the lesion and decalcifying the specimen.
- Decalcify osseous tissue (if required).
- Submit representative sections:
 - Submit diaphyseal margins either transversely (shave) or perpendicularly.
 - Submit radial / soft tissue margins / relationship to anatomical structures (muscle, adipose tissue, etc.).
 - Submit complete sections of the lesion.
 - If the lesion is entirely confined to bone tissue, it is recommended to submit a couple of undecalcified sections (better preservation for ancillary studies).
 - It is useful to document tissue submission with a diagram or photograph.







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DISCLAIMER

The image and text are provided for illustrative purposes only. The tissue sections submitted and the description provided will depend on the individual specimen characteristics, the clinical diagnostic suspicion, the experience of the dissector, and the institutional guidelines of the laboratory.

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