

OCULAR ENUCLEATION

1. Labelled as X, an enucleation specimen measuring XXX cm is received, showing a cornea measuring XXX cm, a pupil measuring X cm in diameter, and an optic nerve measuring X cm in length and X cm in diameter.
2. Externally, the sclera is whitish in colour, the cornea is transparent, and the iris is X in colour // X anatomical structure appears altered // an external lesion measuring XXX cm is identified, located X cm from the optic nerve.
3. Ink the surgical margin (according to institutional guidelines).
4. On horizontal / vertical / oblique sectioning, a lesion measuring XXX cm is identified, located on the nasal / temporal / superior / inferior / posterior / anterior aspect, at a distance of X cm from the optic nerve. The lesion appears to arise from the choroid / ciliary processes / retina and appears to infiltrate X anatomical structure.
5. The lesion is homogeneous / heterogeneous, well / poorly circumscribed, brownish / whitish / blackish in colour, and causes displacement of the lens / parenchyma towards the X aspect.
6. Representative sections are submitted in blocks:

1st Example (Enucleation with lesion involving the optic disc):

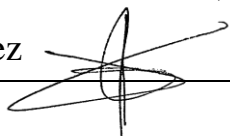
- A1: optic nerve margin.
- A2 - A4: sections of the lesion.
- A5: representative section of the anterior chamber.

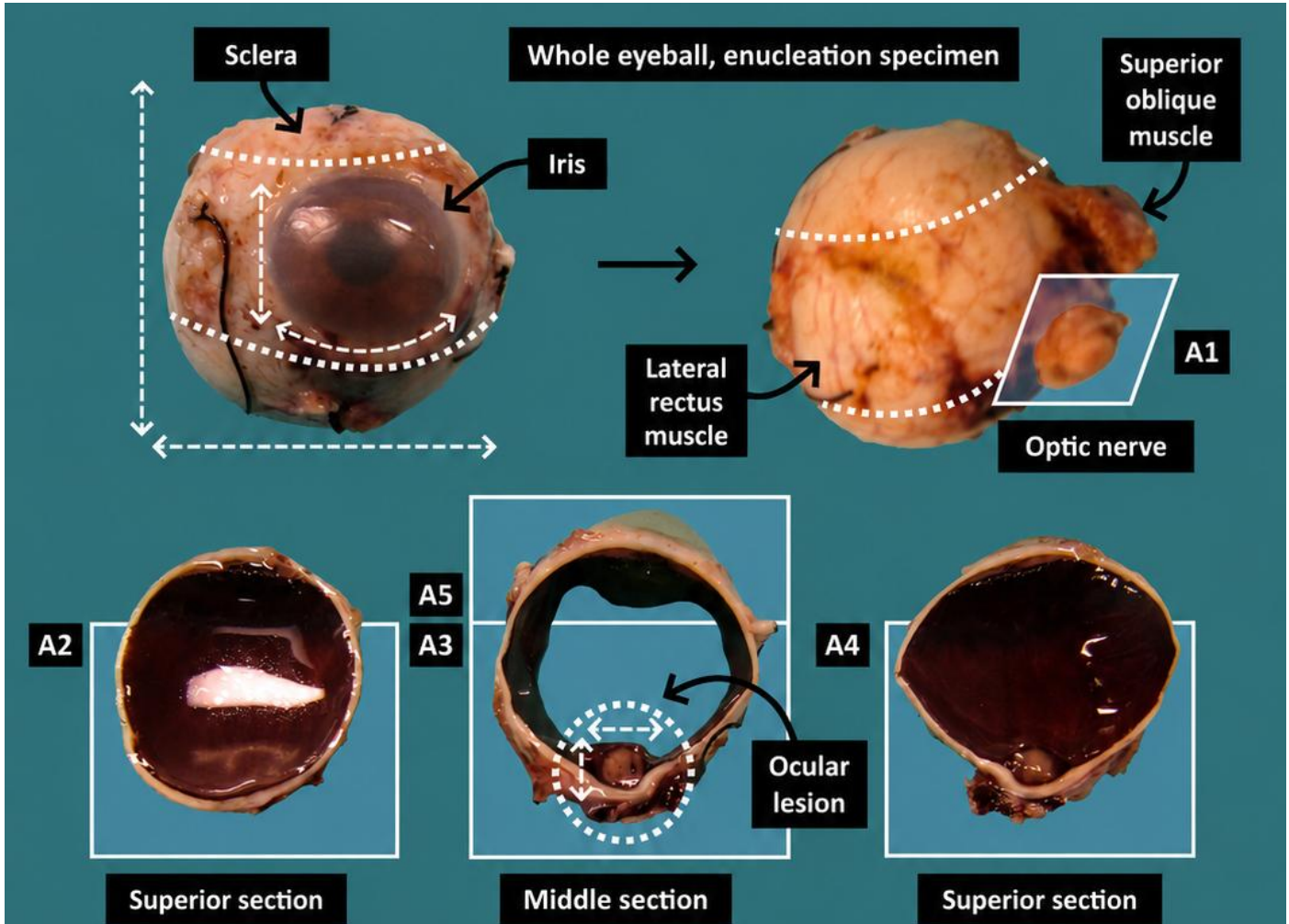
2nd Example (Ocular enucleation with choroidal melanoma):

- A1: optic nerve margin.
- A2 - A3: first complete section from anterior to posterior.
- A4 - A5: second complete section from anterior to posterior.
- A6: representative section of discarded vitreous humour.

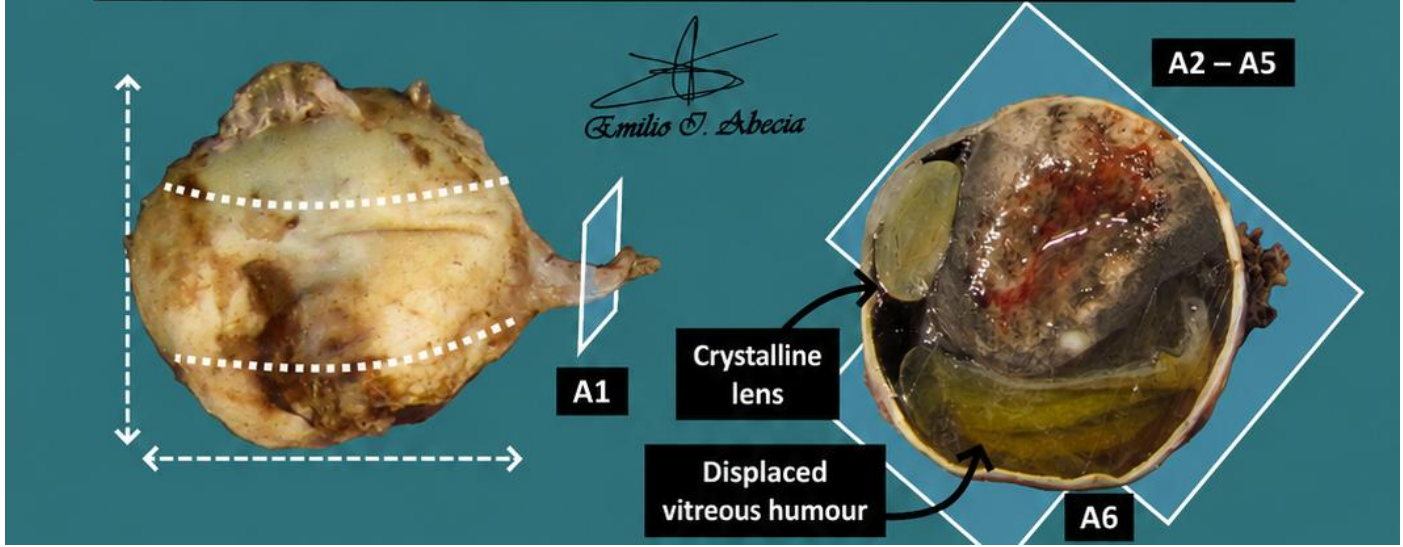
POINTS TO CONSIDER

- These are highly disabling surgical procedures, usually performed following a diagnosis of malignancy based on imaging studies or fundoscopy. In adults, these lesions are most commonly melanomas, whereas in paediatric patients retinoblastomas predominate, although other neoplasms may occur less frequently.
- Evisceration refers to removal of the intraocular contents; enucleation refers to excision of the globe; exenteration refers to removal of the globe together with additional orbital and/or eyelid structures.
- Clinical information and imaging studies should be reviewed to determine the surgical indication and lesion location.
- Photograph the specimen.
- Measure and orient the specimen anatomically, taking into account laterality (left versus right eye) and anatomical landmarks (cornea, muscles, and optic nerve).
- Describe the external surface and ink the margins. Some specialists recommend inking the optic nerve margin and the medial and lateral aspects in different colours to preserve orientation during sectioning.
- Perform a central vertical, horizontal, or oblique section in order to place the lesion in the same plane as the pupil and optic nerve, facilitating complete sections.
- Localise, measure, and describe the lesion. Submit representative sections:
 - Always include the optic nerve margin.
 - Whenever possible, include complete sections demonstrating the relationship of the lesion to anatomical structures.
 - As a general rule, submit at least one section per centimetre of the greatest dimension of the lesion.
 - If large-format blocks are available, their use may be efficient.





1. Orientate and measure the specimen, indicating identifiable anatomical structures and spatial references
2. Describe the external surface
3. Ink the surgical margin
4. Serially section the specimen; identify and measure any lesion and comment on involvement of anatomical structures
5. Describe the cut surface of the lesion
6. Submit representative sections



BIBLIOGRAPHY

- Nicole Cipriani, & Sarah Rose (2019). Eye Enucleation (Neuro). Gross Pathology Manual (University Of Chicago). <https://voices.uchicago.edu/grosspathology/neuro/eye/>
- UCLA Health. Enucleation (Ophthalmic). Gross Manual. <https://www.uclahealth.org/sites/default/files/documents/Enucleation%2010.28.2020.pdf>
- Tatyana Milman, MD; Hans E. Grossniklaus, MD, MBA; Ralph C. Eagle, Jr., MD; Patricia ChevezBarrios, MD; Dan S. Gombos, MD, FACS (June 2021). Retinoblastoma (v4.1.0.0). College of American Pathologists (CAP). https://documents.cap.org/protocols/Retinoblastoma_4.1.0.0.REL_CAPCP.pdf?_gl=1*ow5hb1*_ga*MTc4Nzk0MDczNC4xNzE0NDczNzAy*_ga_97ZFJSQQ0X*MTcxNDQ3MzcwMi4xLjEuMTcxNDQ3NDExMy4wLjAuMA
- Tatyana Milman, MD; Patricia Chevez-Barrios, MD; Ralph C. Eagle, Jr., MD; Hans E. Grossniklaus, MD, MBA; Dan S. Gombos, MD, FACS (June 2021). Uveal Melanoma (v4.1.0.0). College of American Pathologists (CAP). https://documents.cap.org/protocols/Uvea.Mel_4.1.0.0.REL_CAPCP.pdf?_gl=1*ow5hb1*_ga*MTc4Nzk0MDczNC4xNzE0NDczNzAy*_ga_97ZFJSQQ0X*MTcxNDQ3MzcwMi4xLjEuMTcxNDQ3NDExMy4wLjAuMA
- WHO Classification of Tumours Editorial Board. WHO Classification of Tumours of the Eye. Lyon (France): International Agency for Research on Cancer; 2018. (WHO classification of tumours series, 4th ed.; vol. 12).
- Lemos, M. B., & Okoye, E. (2019). Atlas of Surgical Pathology Grossing (Liang Cheng, Ed.). Springer Nature Switzerland AG.
- Susan C. Lester, French, C. A., & Curtis, S. G. (2010). Manual of Surgical Pathology: Expert Consult (Third). Elsevier.
- Shameem Shariff. (2010). Fundamentals of Surgical Pathology (First). Jaypee Brothers Medical Publishers.
- Westra, W. H., Ralph H. Hruban, Timothy H. Phelps, & Christina Iacson. (2003). Surgical Pathology Dissection: An Illustrated Guide (Second). Springer.

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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