Transpalpebral Enucleation

Removes the globe, short piece of the optic nerve, lid margins, conjunctiva, third eyelid and gland of the third eyelid

- Elected when there is an infected ocular surface or tumour not restricted to the globe
- Reduces risk of contaminating the orbit by confining disease with the conjunctival sac
  - the lid margins are sutured together that reduces the risk of contamination of the orbit

*Note – Be careful not to put too much traction on the globe to prevent oculo-cardiac reflex and potential blinding of the fellow eye.

1) The upper and lower eyelids are sutured closed or alternatively, eyelids can be closed using multiple towel clamps (below).

![Towel clamps](image)

2) A circumferential skin incision is made approximately 1 centimetre from the edges of the eyelids.

3) Using a combination of blunt and sharp dissection, Mayo scissors (below) are used to dissect through the orbicularis oculi muscle, fascia, and subcutaneous tissue surrounding the eye. The interior of the bony orbit is used as a guide.
4) The medial and lateral canthal ligaments are sharply transected to allow access to the caudal aspect of the orbit. As there is a large vessel associated with the medial canthus, transection of the medial canthal ligaments is best left until necessary.

5) Complete excision of orbital tissue is necessary in most cases of eye removal. The retrobulbar musculature and the optic nerve sheath should be transected as far caudally as feasible. A vascular clamp can aid in haemostasis while additional excision of remaining orbital tissue is undertaken.

6) In cases where neoplastic infiltration of the bony orbit has occurred, affected areas of ocular periosteum should be thoroughly excised. An orbitotomy may be necessary to remove affected areas of orbital bone; however radical resection of orbital bone and associated lymph nodes is an extensive procedure not recommended except in tertiary care setting.