

# Glossectomy



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# Tongue



☞ The tongue is the most versatile organ in the oral cavity. It is responsible for food prehension, water lapping, sucking, mastication, tasting, swallowing, grooming, thermoregulation, and vocalization

# Anatomy



- ❧ The tongue consists of a root, which anchors it to the oropharynx,
- ❧ A body, which extends rostral to the root and is attached to the floor of the oral cavity via the frenulum,
- ❧ The apex, which is rostral and unattached to the frenulum

# Anatomy



- ❧ The root of the tongue consists of a set of three paired extrinsic muscles: the styloglossus, hyoglossus, and genioglossus muscles
- ❧ Intrinsic muscle ( Superficial longitudinal, Deep longitudinal, Transverse, and Perpendicular).

# Blood Supply



- ❧ The lingual vein starts at the apex of the tongue, courses alongside the lingual artery, and eventually empties into the facial vein.
- ❧ Lingual artery is a branch of the external carotid artery , A secondary blood supply by tonsillar branch of the Fascial artery.

# Innervation



- ❧ Hypoglossal nerve
- ❧ Facial nerve
- ❧ Glossopharyngeal nerve
- ❧ Trigeminal nerve
- All of the muscles of the tongue, intrinsic and extrinsic, are innervated by the hypoglossal nerve .
- Sensory information is provided by the glossopharyngeal nerve, trigeminal nerve and the facial nerve

# *Glossectomy*



- ❧ Surgical excision or amputation of all or part of tongue.
- ❧ Hemostasis must be considered before any type of surgery on the tongue.

# Indication



- ❧ Traumatic injuries of tongue such as lacerations; ulcerations and burns from ingestion of caustic substances or electrical injuries
- ❧ Lingual abscesses.
- ❧ Bad habits (Self Sucking)
- ❧ Neoplasia and Hyperplastic Lesions (Oral papillomatosis, Malignant melanoma and squamous cell carcinoma).





# Preoperative Preparation



- ❧ Preoperative instructions which will include fasting your dog from food prior to surgery. Because surgery takes place in the oral cavity.
- ❧ Perioperative antibiotics are generally not indicated because the mouth is remarkably resistant to infection, presumably because of its excellent blood supply and the antibacterial properties of saliva.
- ❧ Povidone- iodine solution or a 0.2% chlorhexidine solution is used for preparation of the oral mucosa.
- ❧ A mouth gag may be placed before or after surgical site preparation to facilitate exposure of the inside cheeks and lips.

# Procedure of partial Glossectomy

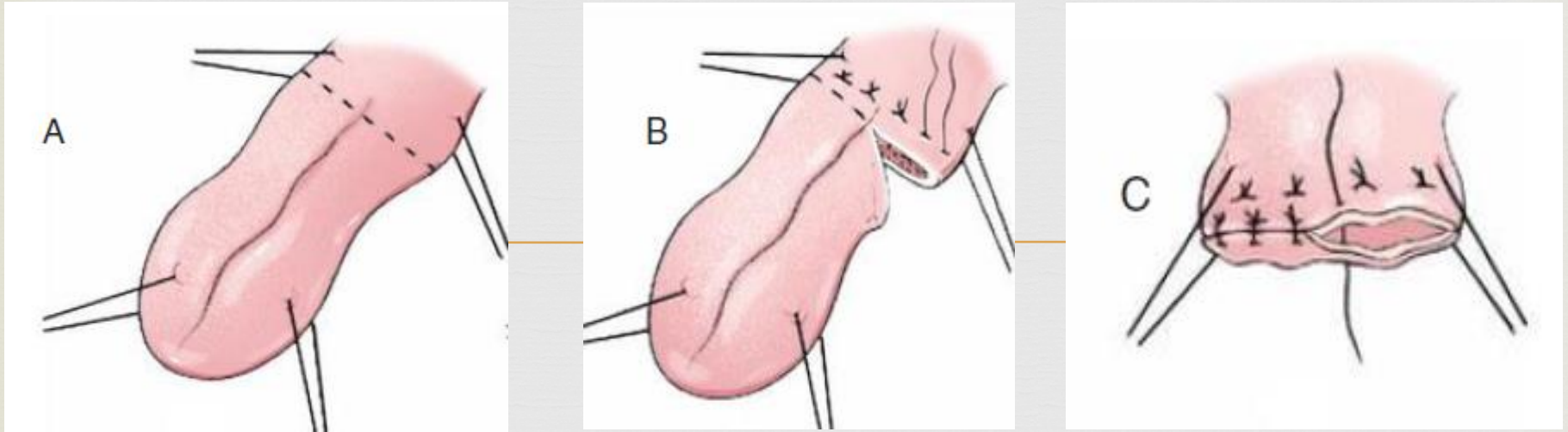
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- ❧ This is done under general anesthesia in small animals but local anesthesia in ruminant .
- ❧ Bleeding is prevented by means of clamps placed transversely across the tongue or by the use of a tourniquet.
- ❧ Stay Suture is a place on tongue to exposure site of operation
- ❧ The lingual artery and vein run on either side of the vertical middle partition.

# Cont.



- ❧ A Preplacement of mattress sutures outside surgical margins before incision will compress the tissue, reducing blood loss during surgery on the tongue.
- ❧ Making an incision anterior to the damaged tissue or tumor, between the tumor and the back of the mouth cavity. Incisions used may be longitudinal, cuneiform or transverse depending on the location of disease or damage.
- ❧ After resection, the mucosal edges are separately reapposed with fine, monofilament, rapidly absorbable suture in a simple continuous or interrupted pattern.



Glossectomy. **A**, Stay sutures are placed in the tongue to facilitate retraction and exposure. **B**, Interrupted mattress sutures are preplaced across the tongue for hemostasis before transection. **C**, Mucosal edges are apposed with an interrupted or continuous pattern.

# Post Op. Care



- ❧ Soft food at least 60 days.
- ❧ Dogs undergoing larger glossectomies often have the desire to eat but may need assistance.
- ❧ Nutritional supplementation by esophageal tube depended on nutritional status of the animal
- ❧ Systematic antibiotic for 5 days
- ❧ Daily inspection of incision.

# Complication



- ❧ Bleeding
- ❧ Aspiration pneumonia
- ❧ Tongue necrosis
- ❧ Prehension difficulties
- ❧ Ptyalism

# Ref.



 **Veterinary Small Animal Surgery**



When you do not succeed in taking giant steps on the road to your goal, be satisfied with little steps, and wait patiently till the time that you are able to run, or better still, to fly. Be satisfied to be a little bee in the hive who will soon become a big bee capable of making honey...



*Thank you ...*

*Any Question????*