

## Glossectomy in Small Animals

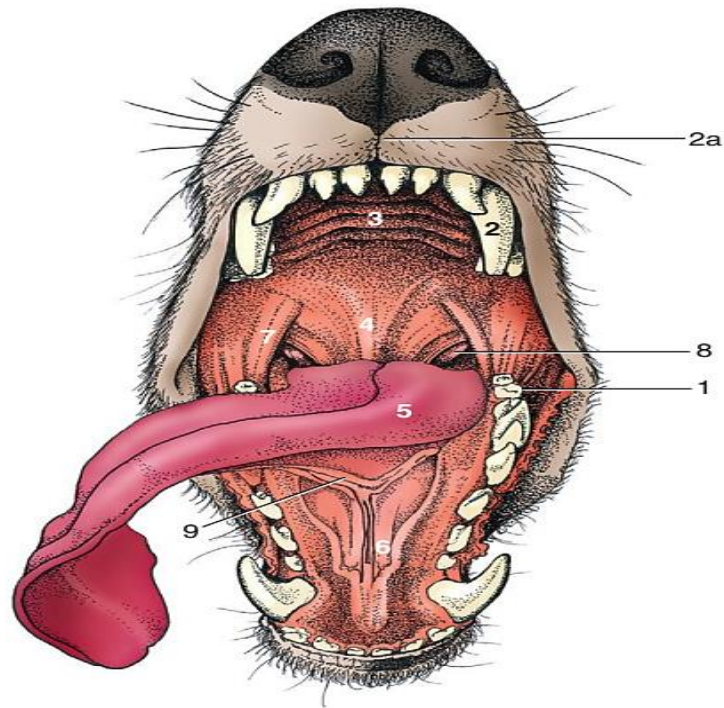
Glossectomy **is defined as excision or amputation of any portion or all of the oral (free) tongue rostral to the frenulum.**

### General anatomy of Tongue:

- The 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 (freely movable)
- The dorsal surface of the tongue is covered with a thick mucous membrane. Within the mucous membrane are structural units called papillae.
- The ventral surface of the tongue is covered in a thin mucous membrane, through which the lingual vein can often be seen coursing longitudinally on each side of the frenulum.
- Fungiform, vallate, and foliate papillae are gustatory and therefore contain taste buds and facilitating grooming by acting as a type of comb, especially in the feline tongue.

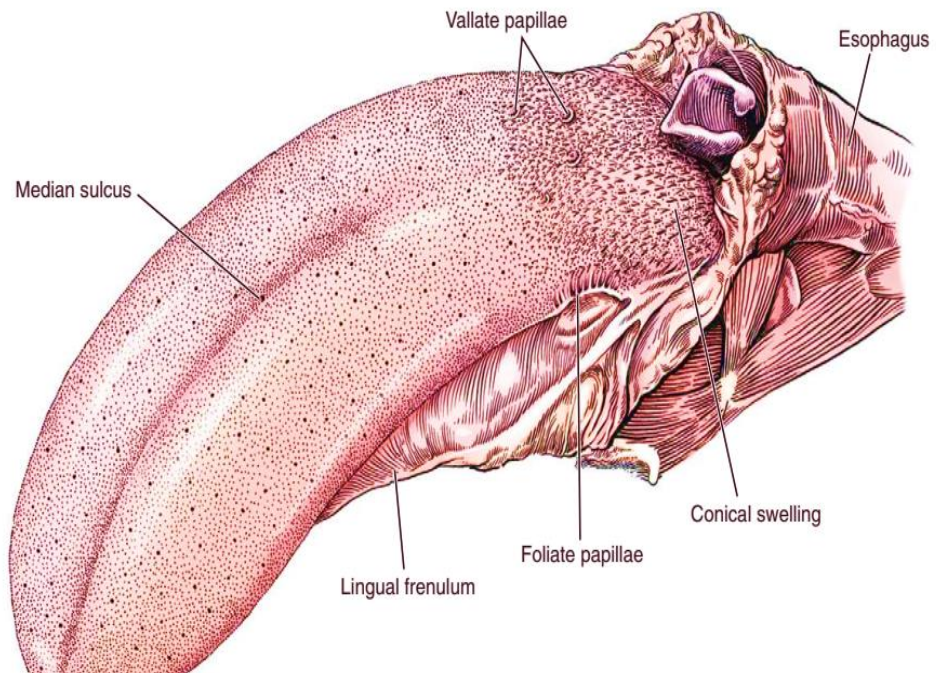
### Vessels supply of Tongue:

- The right and left lingual arteries anastomose throughout parenchyma of the tongue muscle.
- The lingual artery is a branch of the internal carotid artery and is the principle source of blood to the tongue.
- The lingual vein starts at the apex of the tongue, courses alongside the lingual artery.
- The rostral part of the tongue is innervated by the sensory lingual branch of the trigeminal nerve.
- The caudal part of the tongue is innervated by the glossopharyngeal nerve providing sensory function for taste.



**General view of the oral cavity of the dog.**

1, Vestibule; 2, canin tooth; 3, hard palate; 4, soft palate; 5, tongue; 6, sublingual caruncle; 7, incisor; 8, palatine tonsil; 9, frenulum.

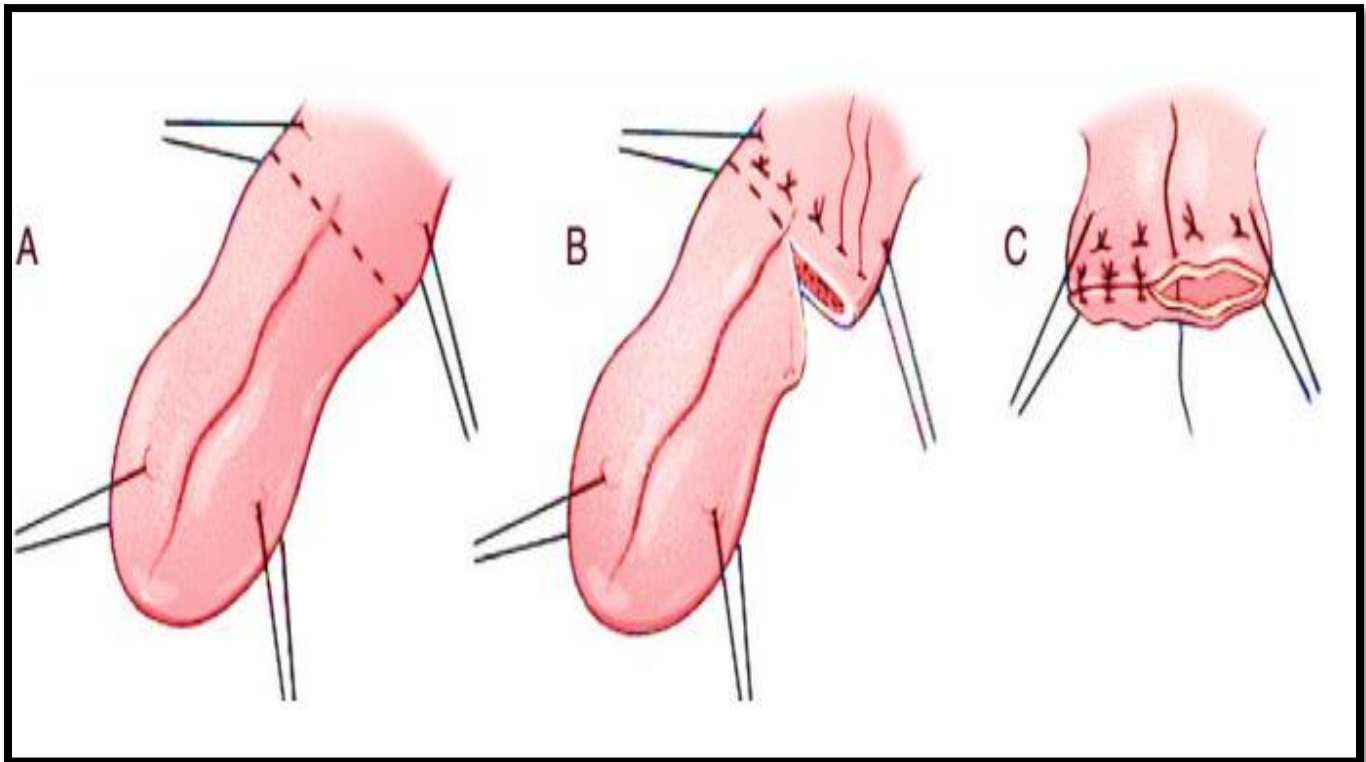


## Preoperative Preparation

- A laryngoscope with adequate lighting, endotracheal tubes of multiple sizes, and availability of an oxygen mask are essential.
- After the endotracheal tube is in place, it should be secured so as to not interfere with the surgical site. Because blood, saliva, and lavage fluid may accumulate in the pharynx during the course of oral surgery and to ensure protection of the airway and prevent aspiration pneumonia.
- 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.
- 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.

## Indications of Glossectomy in small animals

- Lingual abscesses.
- Oral papillomatosis.
- Malignant melanoma and squamous cell carcinoma.
- Traumatic injuries such as lacerations; ulcerations and burns from ingestion of caustic substances or electrical injuries.
- Ankyloglossia of tongue which is a congenital disorder in the lingual frenulum is abnormally short and thickened and cause restricting of movement.



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.

### Postoperative care:

- 1- Effective antibiotic for five day.
- 2- Soft food at least two month.
- 3- The incision inspect daily to note any signs of inflammation or wound dehiscence.
- 4- Remove of suture materials after 14 day P.O.

## **Complications:**

- 1- Bleeding.
- 2- Ptyalism .
- 3- Heat stress.
- 4- Aspiration pneumonia.
- 5- Prehension difficulties.
- 6- Tongue necrosis.