Salivary glands

Salivary gland are paired organs that secrete saliva by their ducts into oral cavity.

Saliva: is a mixture of serous and mucous fluids produce by salivary glands.

Function of saliva:-

1-lubrication and moist of the oral cavity.

2-digestion and swallowing of the food.

3-protection of the oral cavity .

4-cooling the body through panting.

5-Secreting enzyme (e.g .amylase and lipase).

Classification of salivary glands

I- According to the size:-

1-Major salivary glands:

*large mass of glandular tissue include (parotid. Mandibular and sublingual salivary glands).

2- Small or minor salivary glands:

*it is small glandular tissue present inside the oral cavity under, its mucus membrane.

*They named according to their location.

-Lips (labial), cheeks (buccal), tongue (lingual), palate (palatine) salivary glands.

Π-According to the number of excretory ducts:-

1-Monostomatic glands:

*has only one excretory duct.

Example: parotid and mandibular salivary glands.

2-polystomatic glands:

*have large number of excretory ducts.

Example: all the minor salivary glands.

Parotid salivary glands:

*It is purely serous in most species except in dog, it is situated chiefly in proximity to the ramus of the mandible, so named from its relation ship to the ear.

*The parotid duct arises from the confluence of numerous small excretory ducts.It empities into buccal vestibule.

Parotid glands

*(horse):- it is largest salivary glands.

*(ox):-it is smaller than mandibular.

(dog):-it is smaller than mandibular.

Mandibular salivary glands:-

*It produce a mixed mucous and serous secretion.

*It is located close to the angle of the jaw and is partially covered by the parotid salivary glands.

*It is slightly bigger than the parotid salivary glands in most dogs and cats, but considerably larger in ruminants.

*This glands also drains by a single large duct that runs ventral to the frenulum of the tongue to open on the sublingual caruncle.

Sub lingual salivary glands:-

*It is situated beneath the mucous membrane of the mouth, between the body of the tongue and the ramus of the mandible.

*In all species except the horse there are two glands:-

Monostomatic and polystomatic sublingual glands.

*The monostomatic sublingual glands: (absent in the horse)- has only one excretory duct.

*The polystomatic sublingual glands: consist of a fairly large number of small individual glandular lobes and thus opened by several ducts into the lateral sublingual recess.

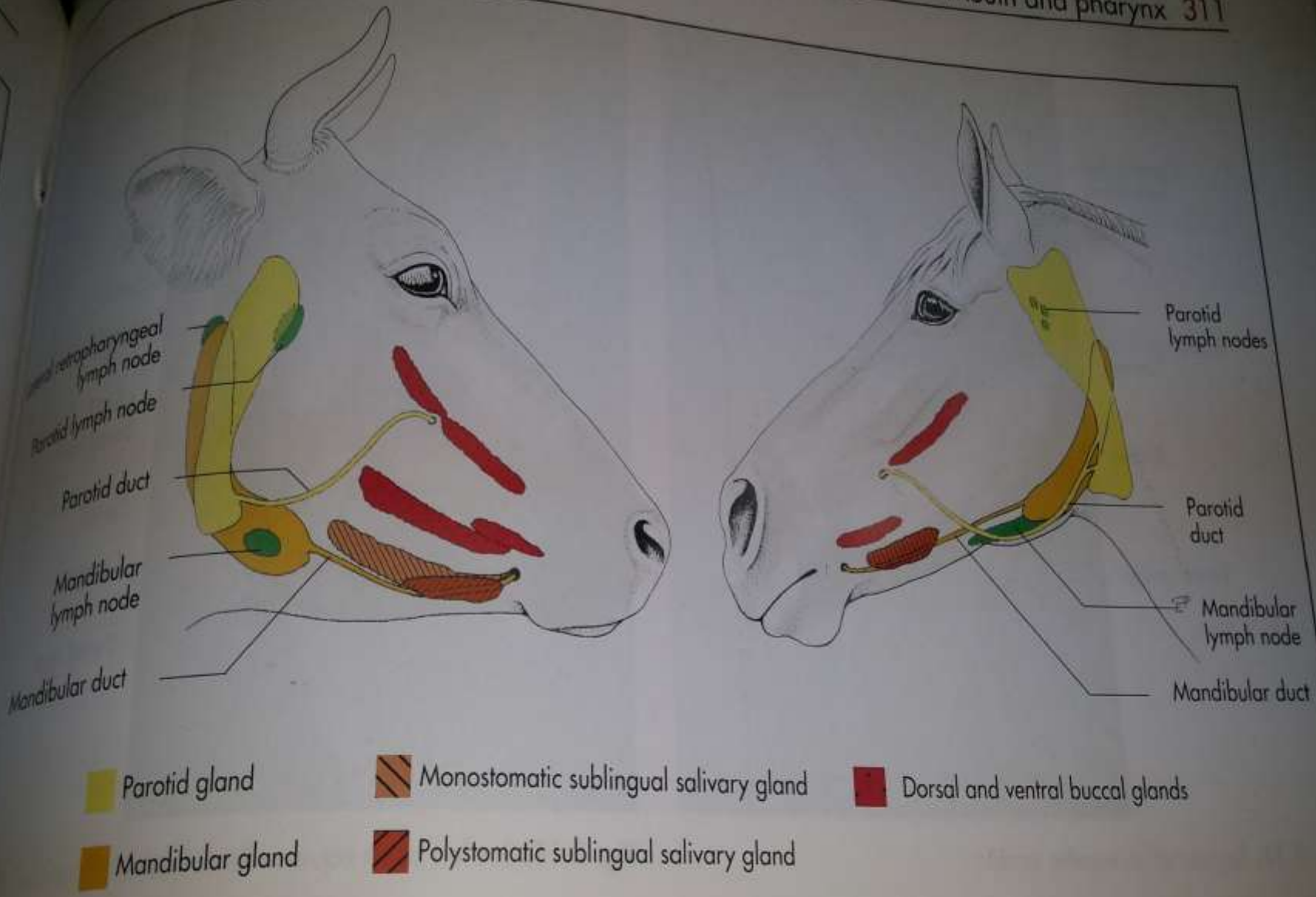
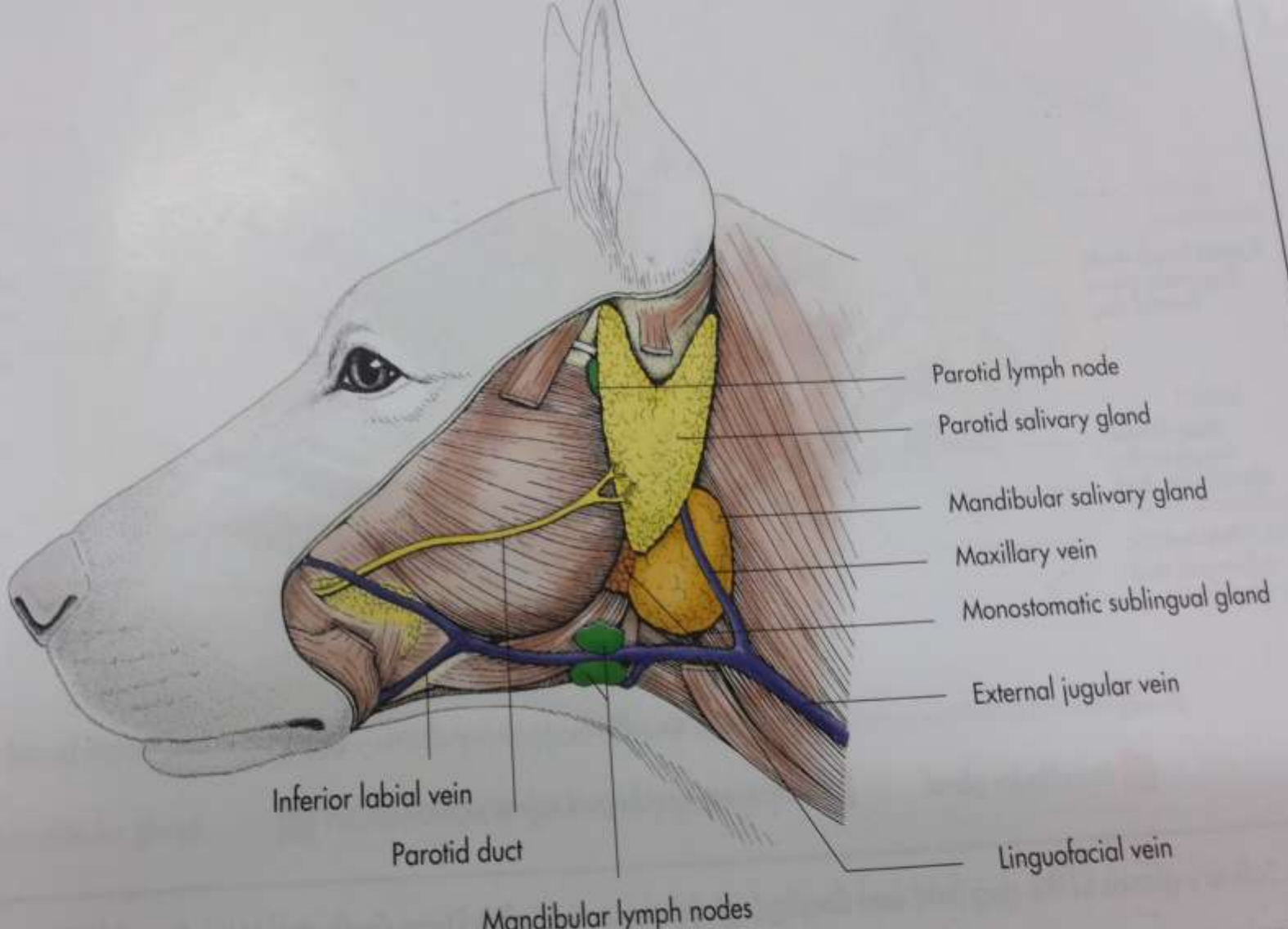


Fig 7-16. Salivary glands of the ox (left) and the horse (right) (schematic); after Dyce, Sack and Wensing, 2002.



7-14. Topography of the salivary glands of the dog (schematic).

Minor salivary glands:-

*It is called according to the location (labial, palatine, lingual and buccal glands).

#The buccal glands in dog called zygomatic glands.

*location= near the zygomatic crest.

*shape= large long mass.

*Duct= have many orifice.

#The buccal glands in horse divided in- 1- dorsal buccal glands

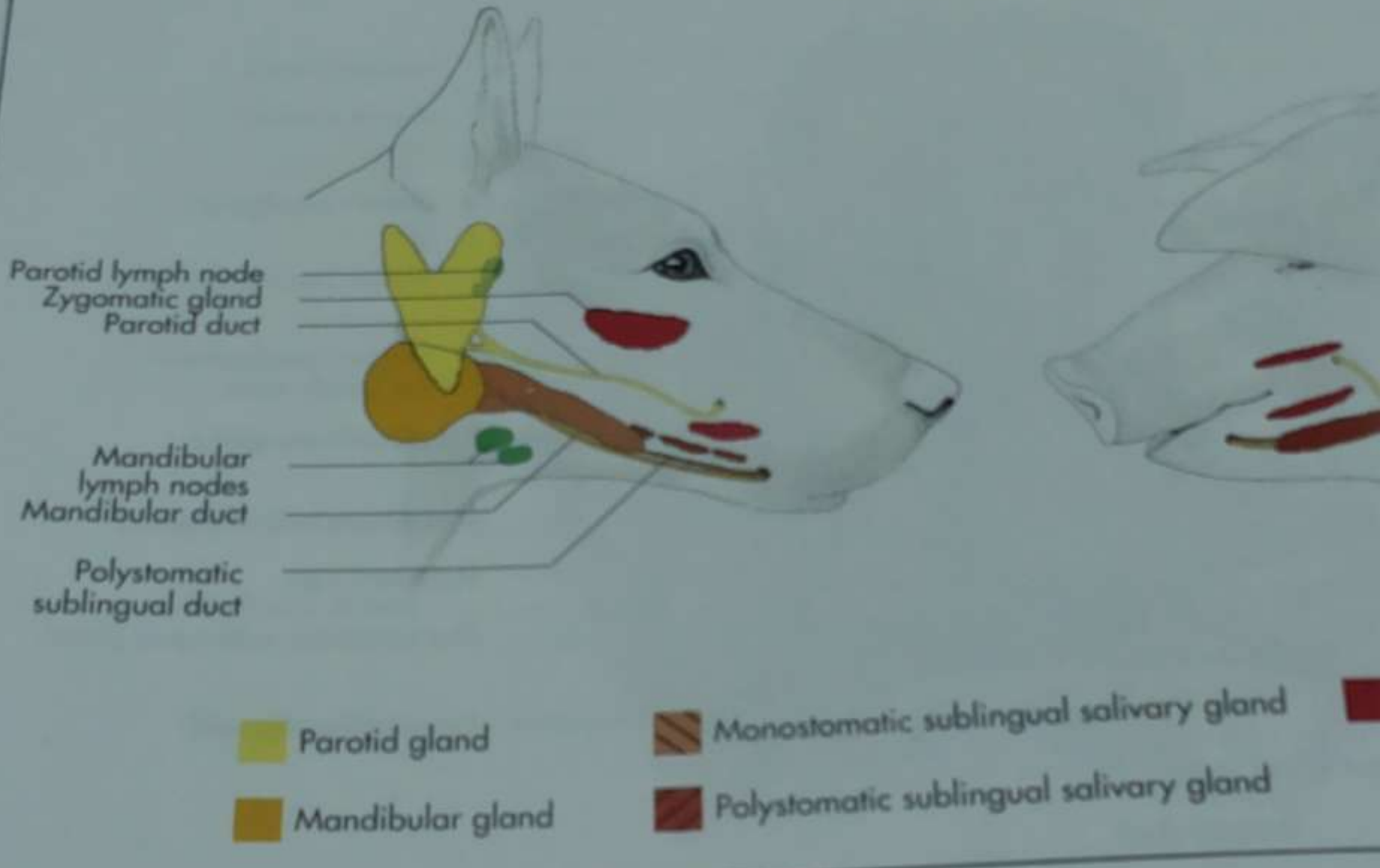
2- ventral buccal glands.

#The buccal glands in ruminant divided in-

1-dorsal buccal glands.

2-medial buccal glands.

3-ventral buccal glands.



. 7-15. Salivary glands of the dog (left) and the pig (right) (schematic); after Dyce, Sac

Pharynx:-

*It is a musculo –membranous organ which belong to the digestive and respiratory tracts. It somewhat funnel-shape, the large rostral part joining the mouth and nasal cavity, while the small end is continued by the esophagus.

***The pharynx have seven openings:**

1-internal nasal opening (two).

2-austachian tube (two).

3-oral opening (one).

4-laryngeal opening (one).

5-esophageal opening (one).