

2012. Korea

Pathology and surgery of the salivary glands

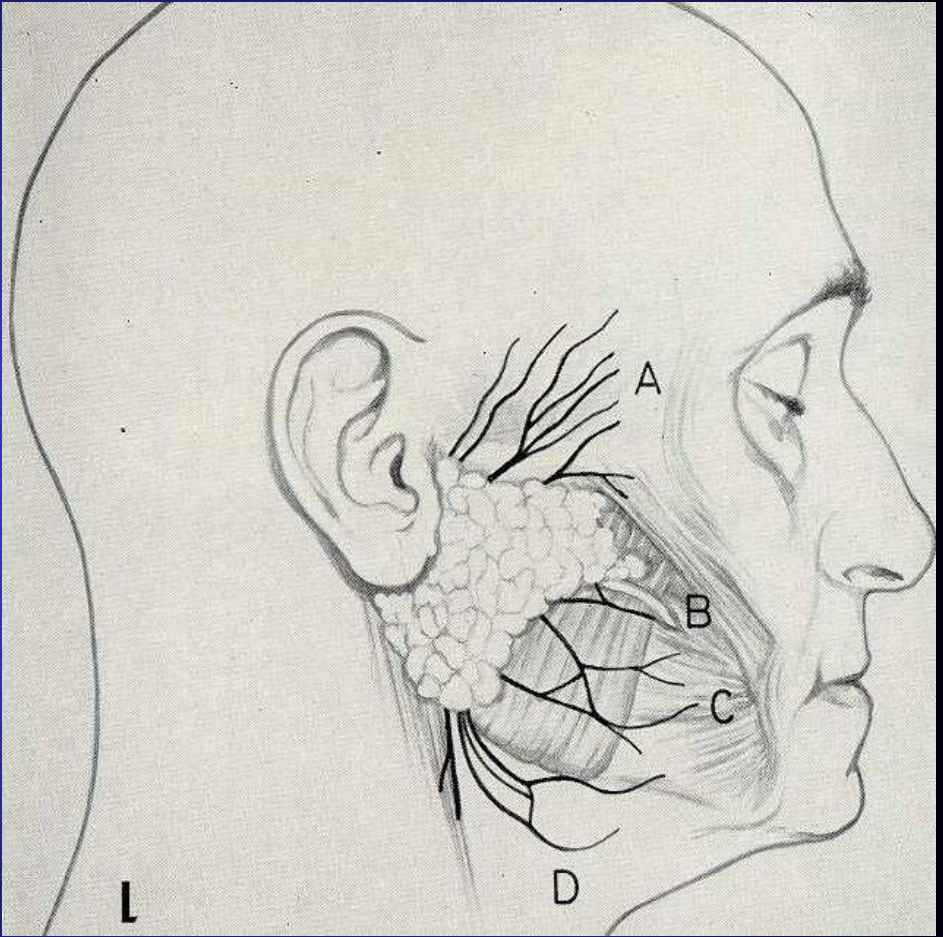
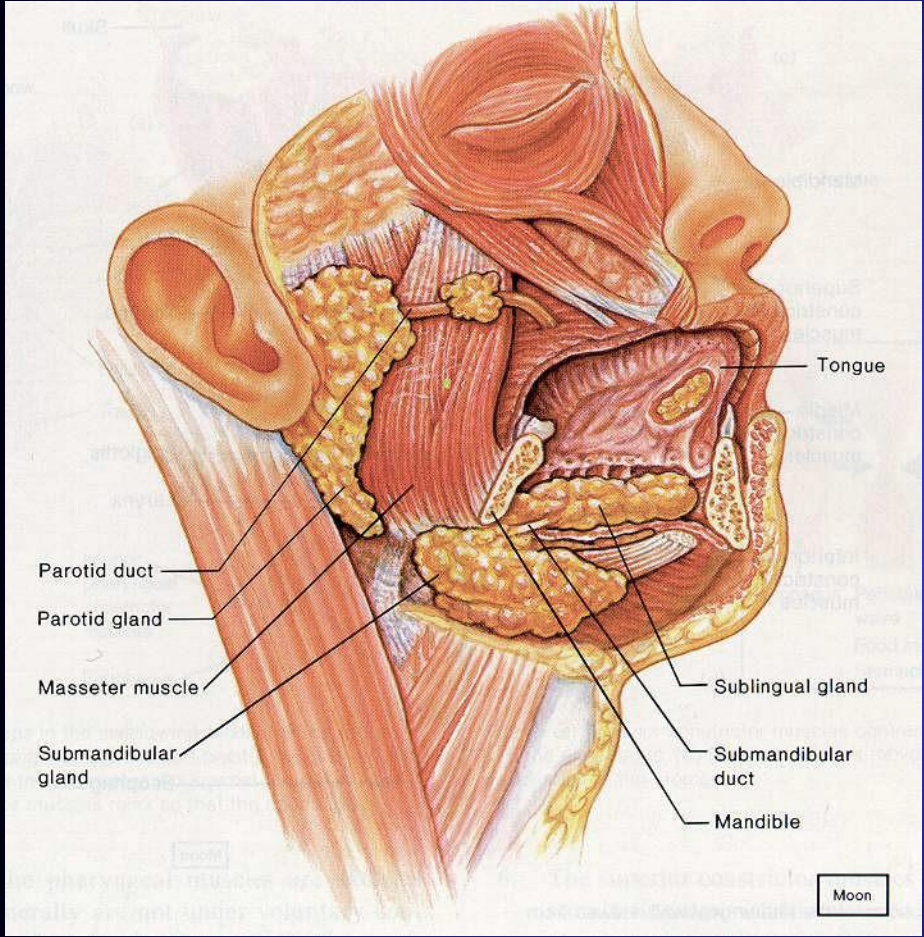
**Semmelweis University
Budapest, Hungary**

Anatomy of the salivary glands

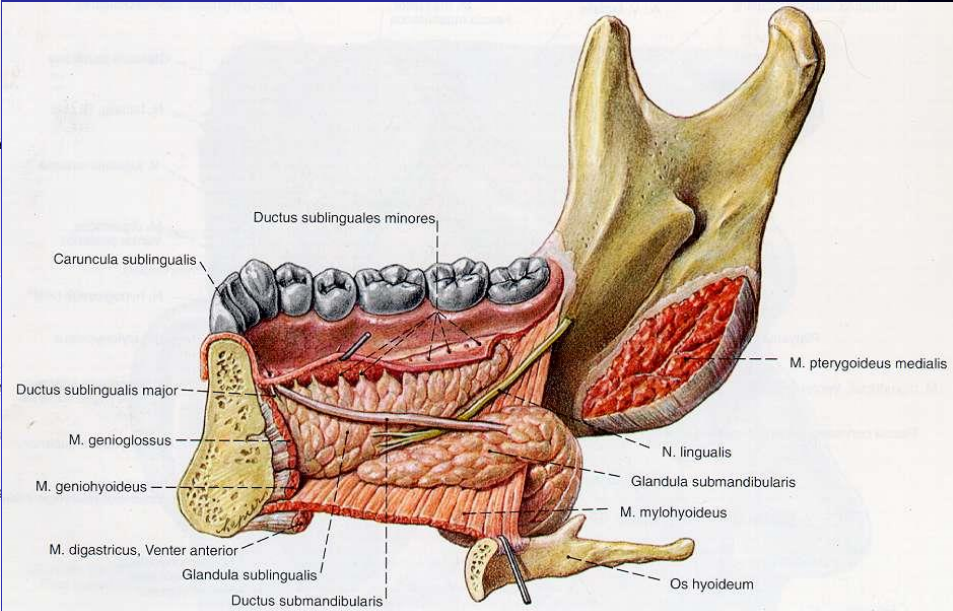
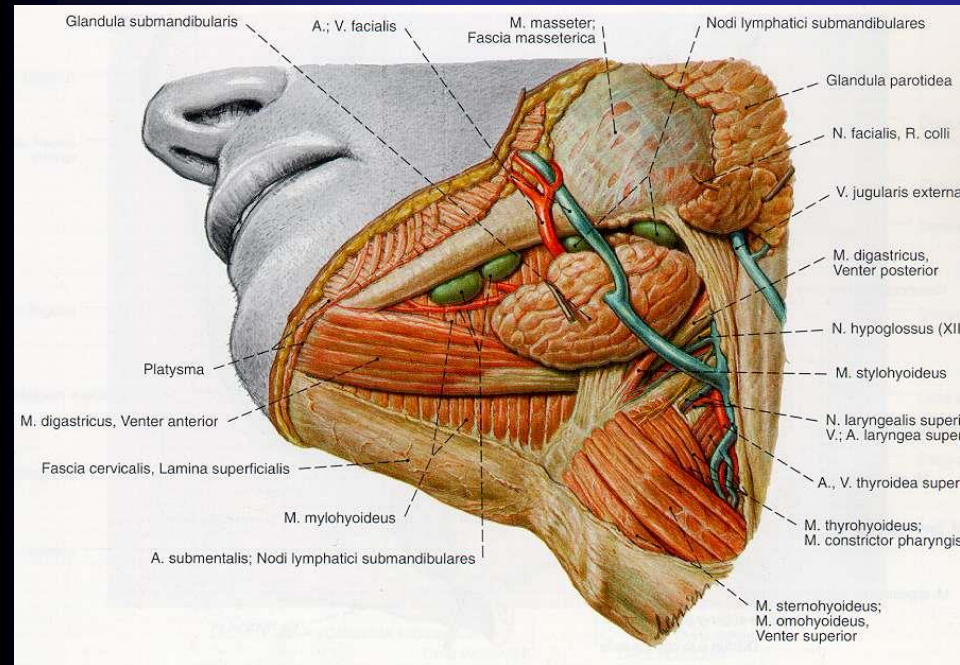
Parotid gland

Superficial lobe

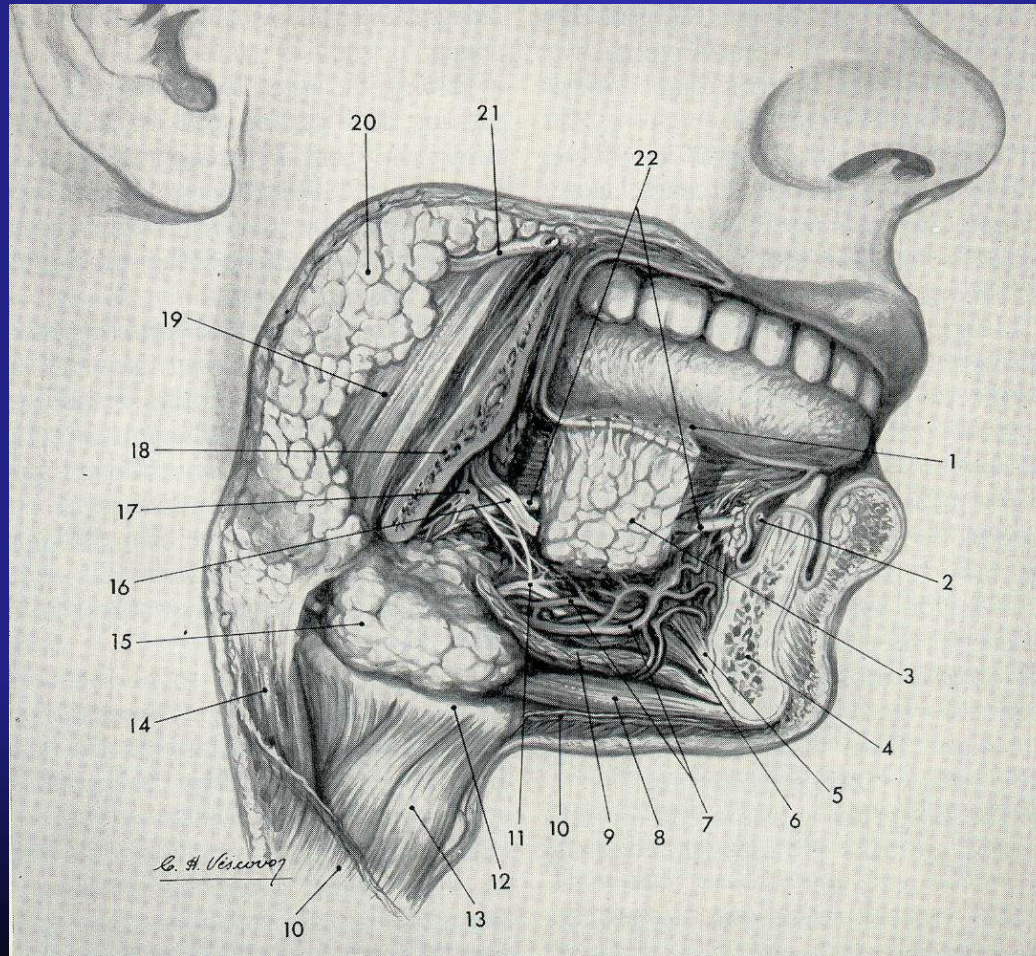
Deep lobe

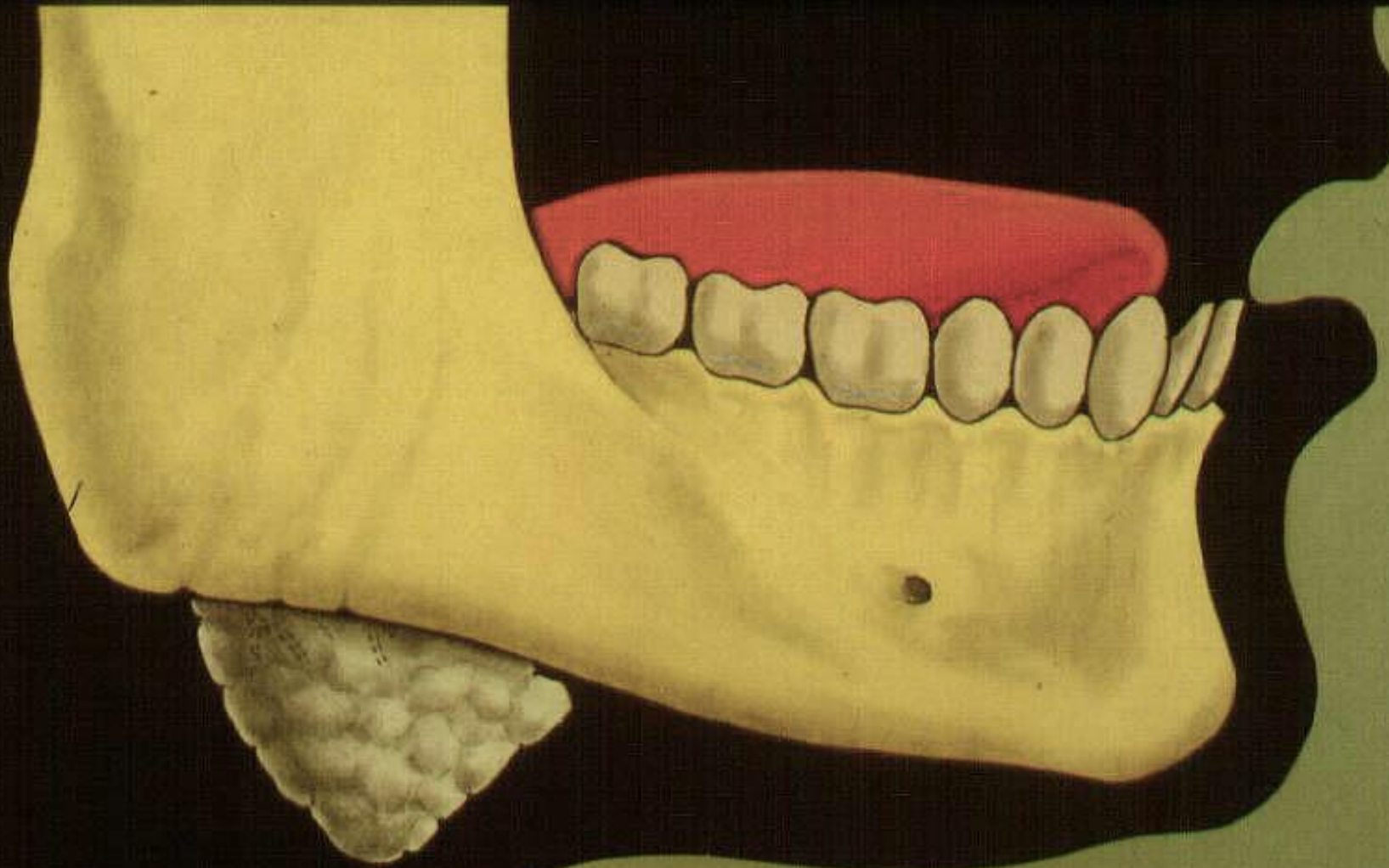


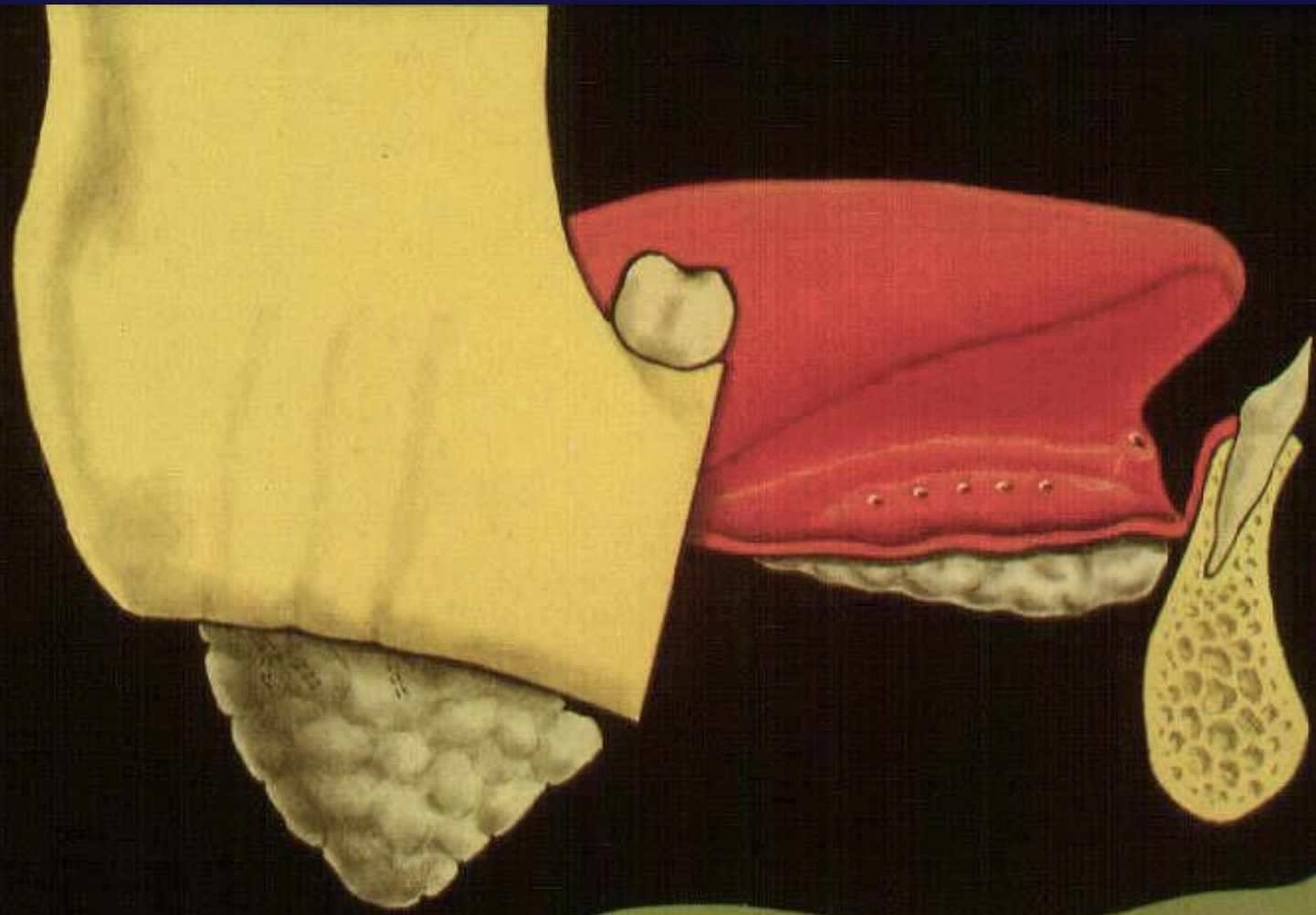
The submandibular gland

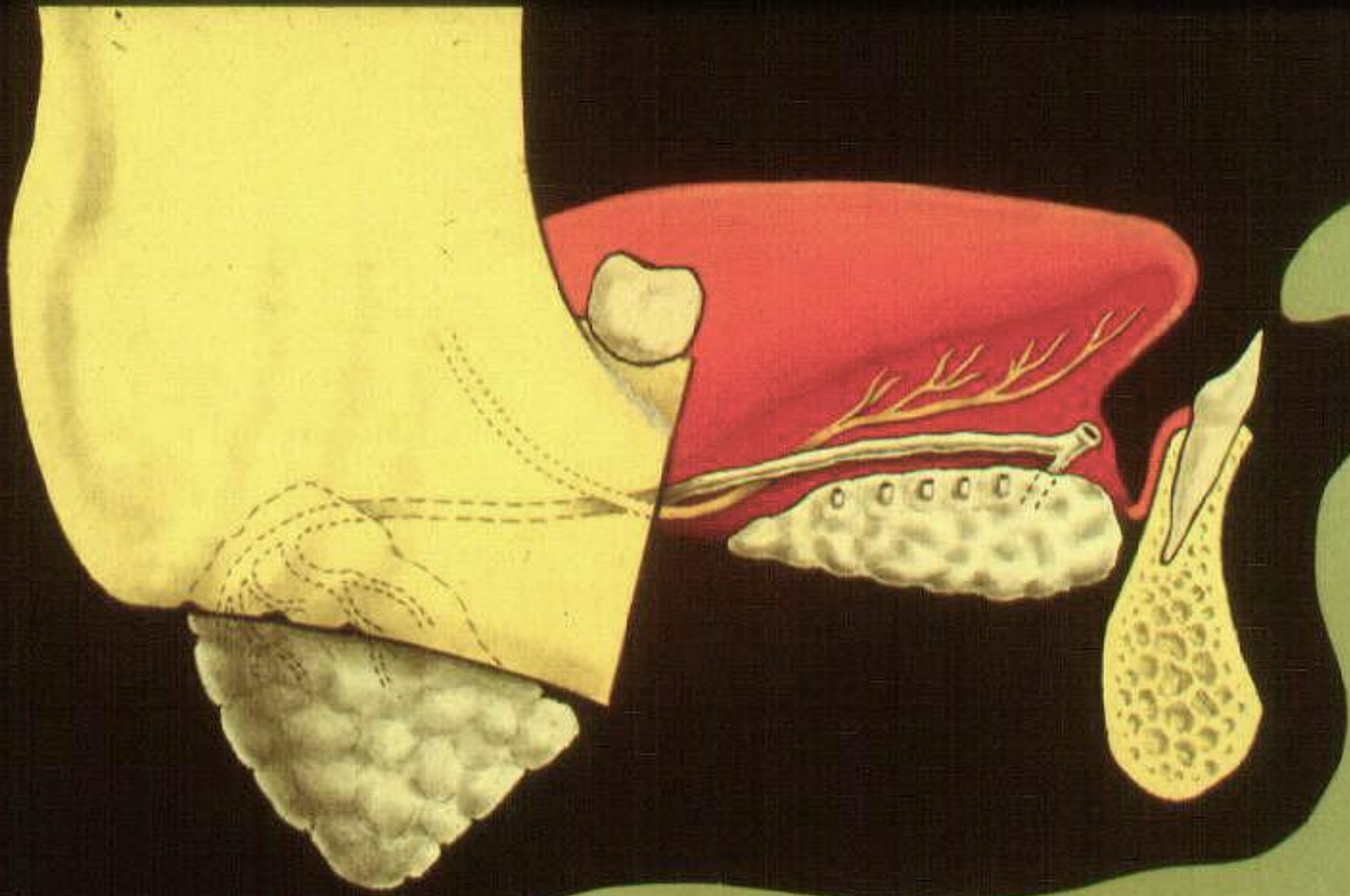


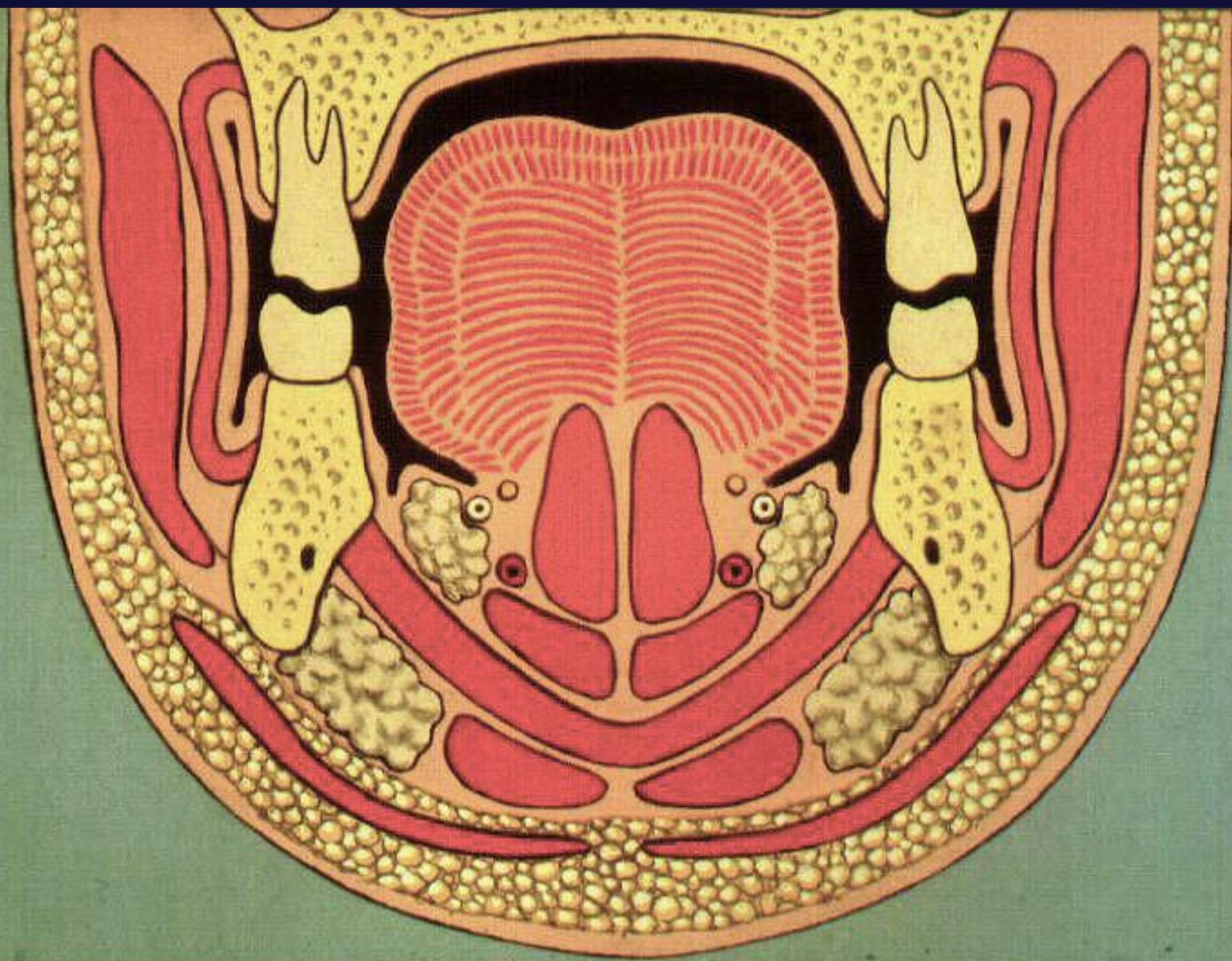
The sublingual and submandibular glands: relationships within their respective areas

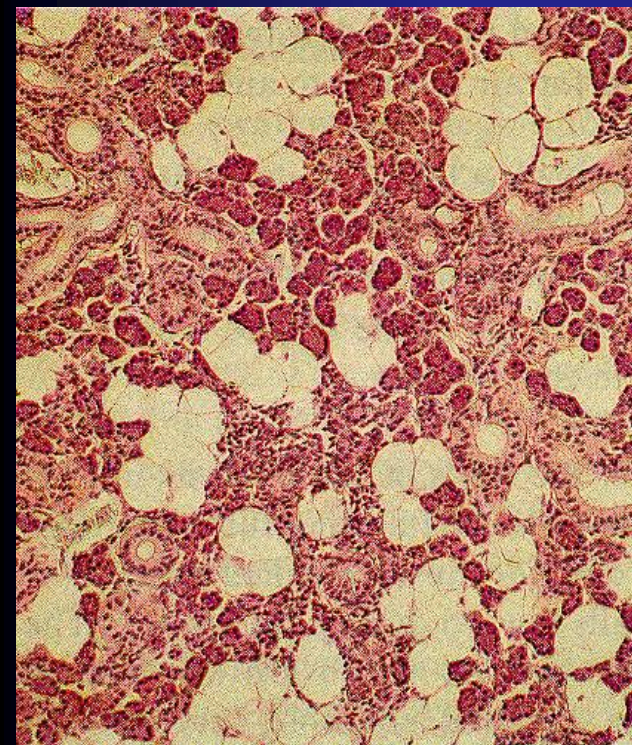




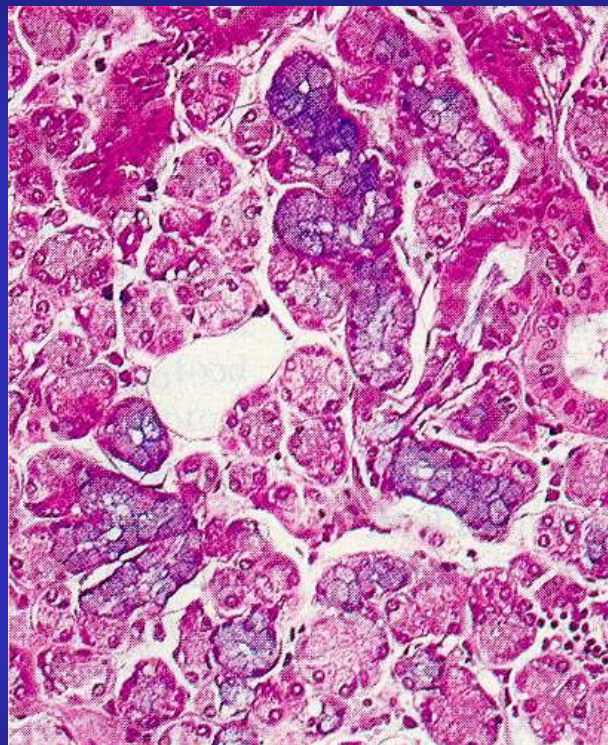




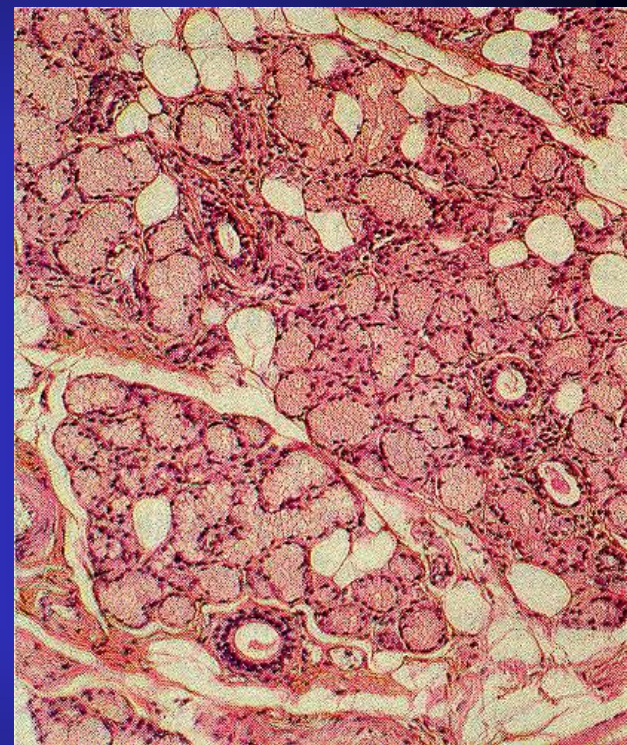




**Parotid
serous**

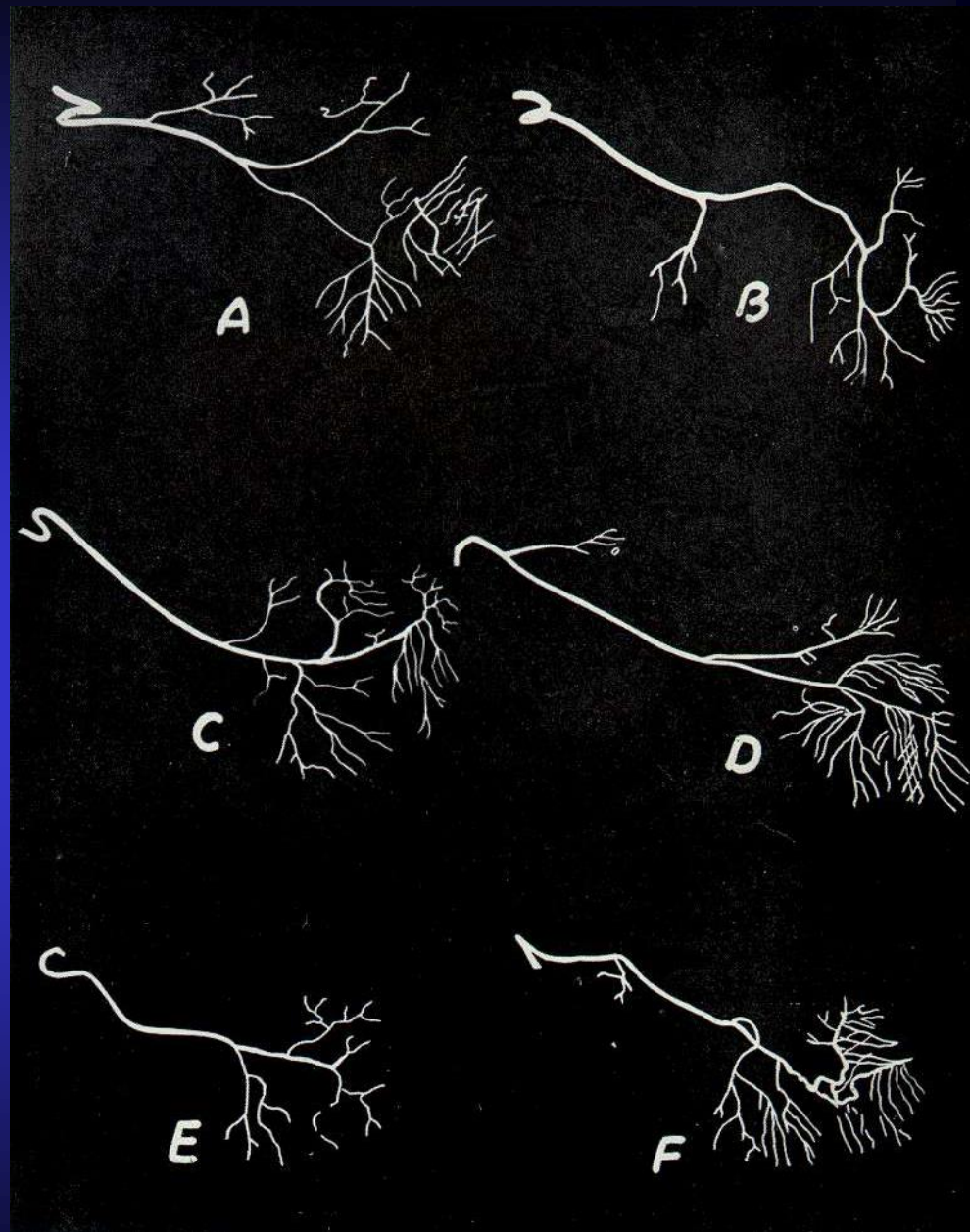


**Submandibular
mixed**

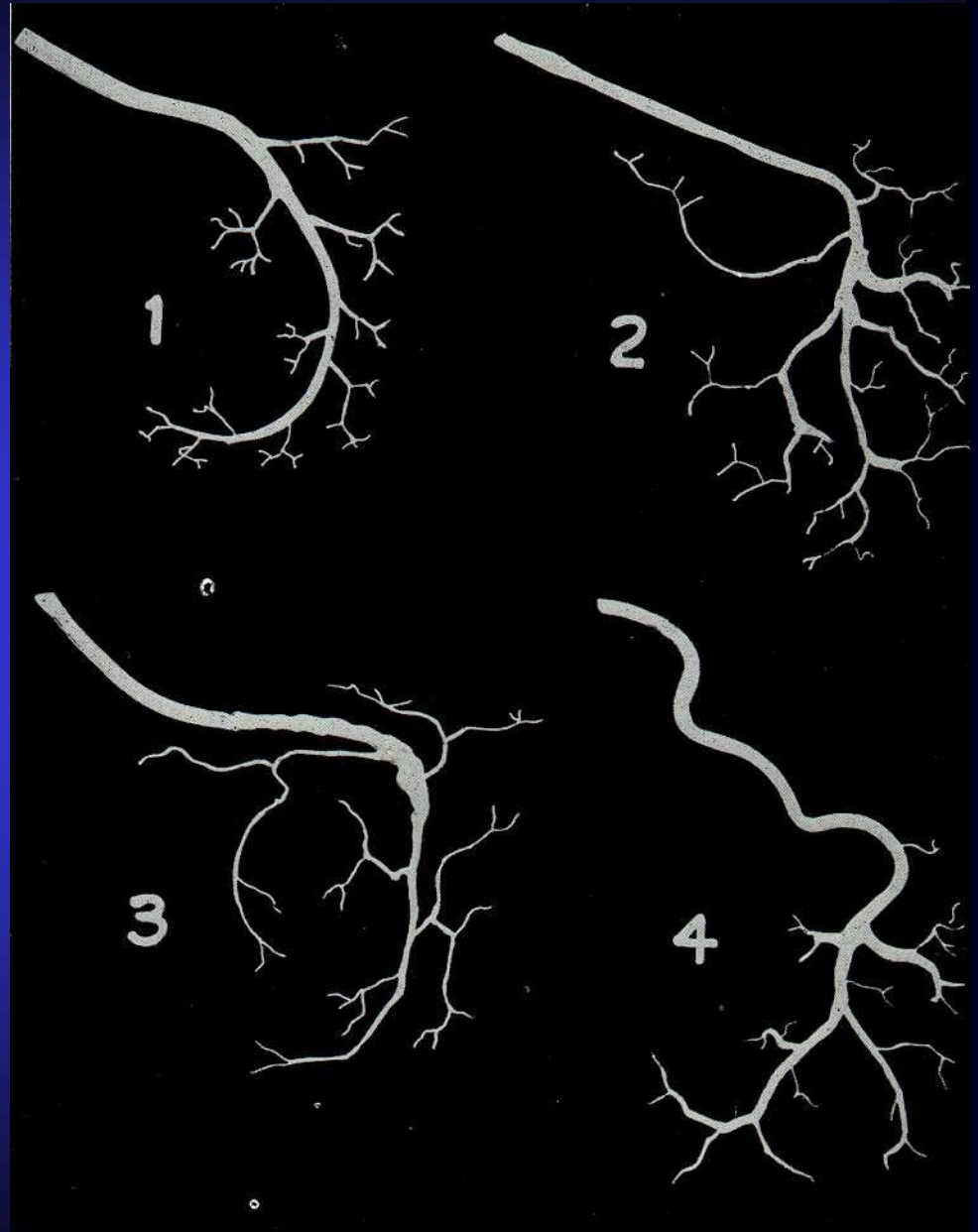


**Sublingual
mucous**

**Different types of
normal parotid gland
ramifications
(Aubert and Guerin)**



**Different types of
normal submandibular
gland ramifications
(Aubert and Guerin)**



Pathology of the salivary glands

malformations
traumatic lesions
sialadenitis
sialolithiasis
special inflammations
(Sjögren sy.)
tumors

Diagnostic methods

Physical examination

Radiography (Sialography)

Ultra-sounds

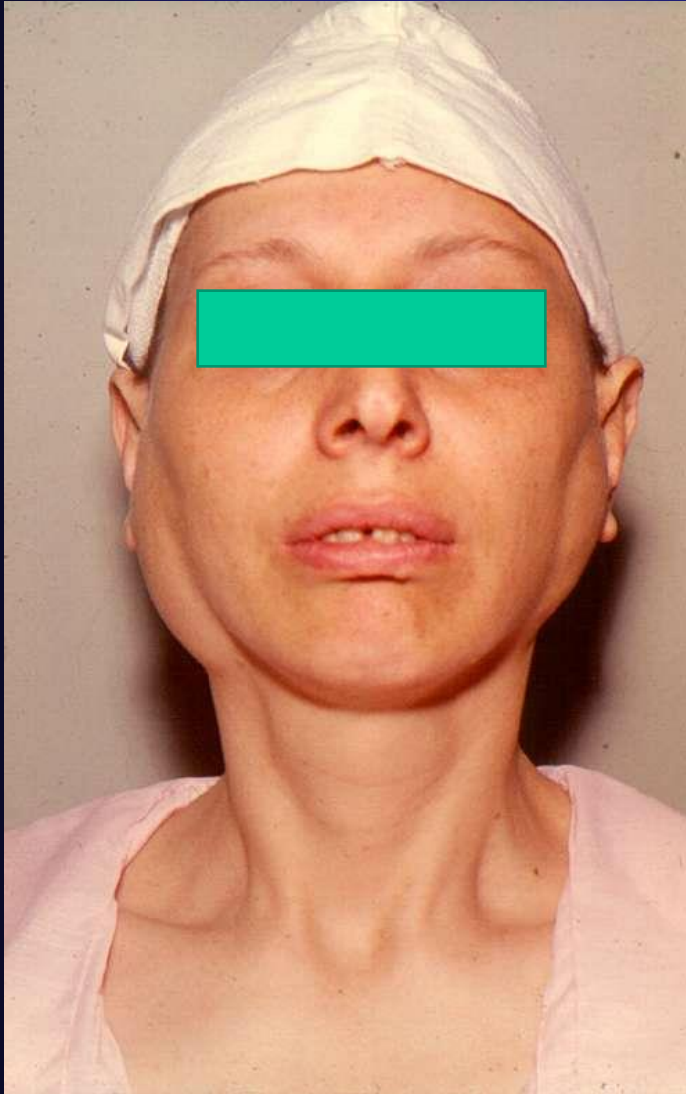
Computer tomography

MRI

Isotop

Biopsy

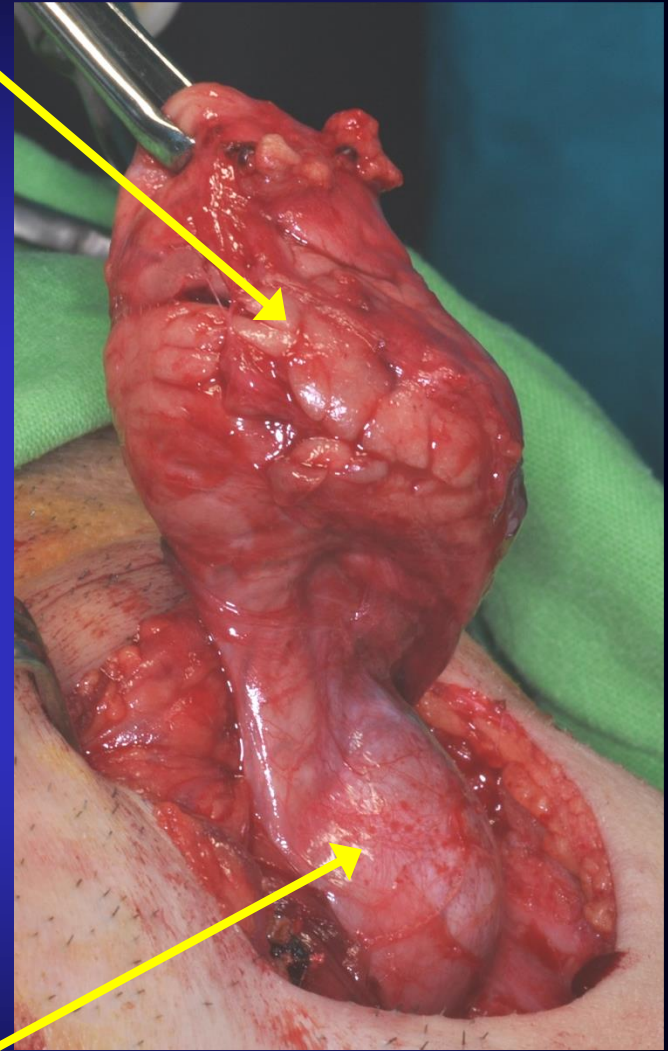
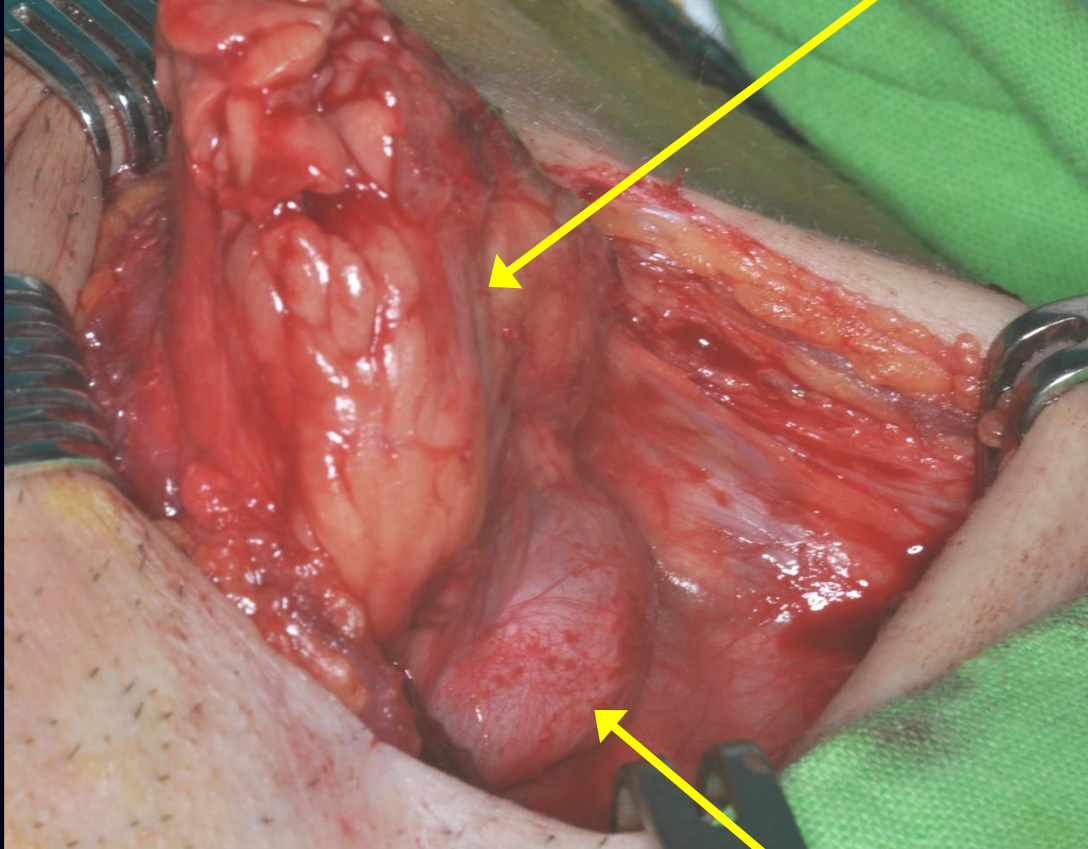
Physical examination



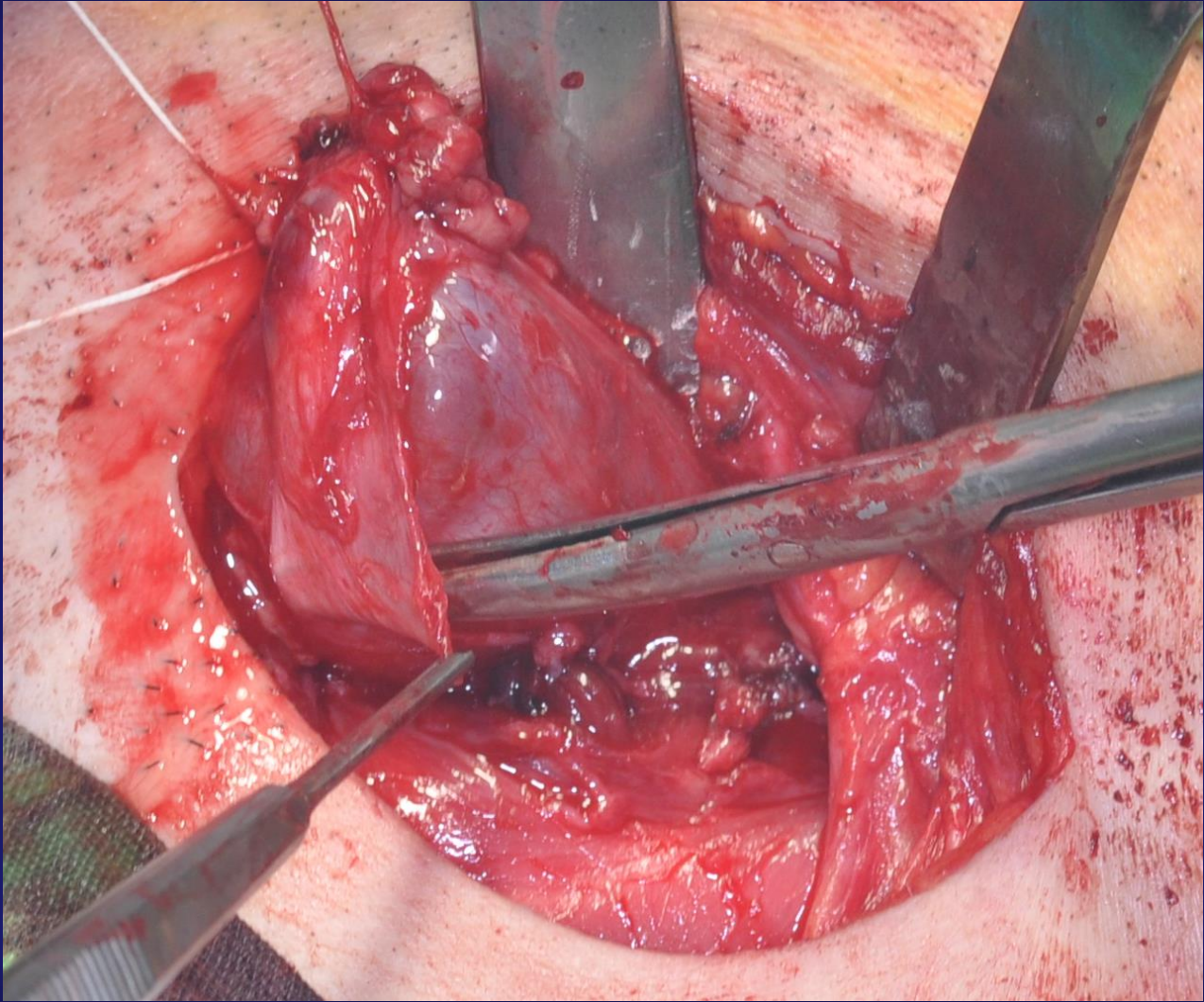


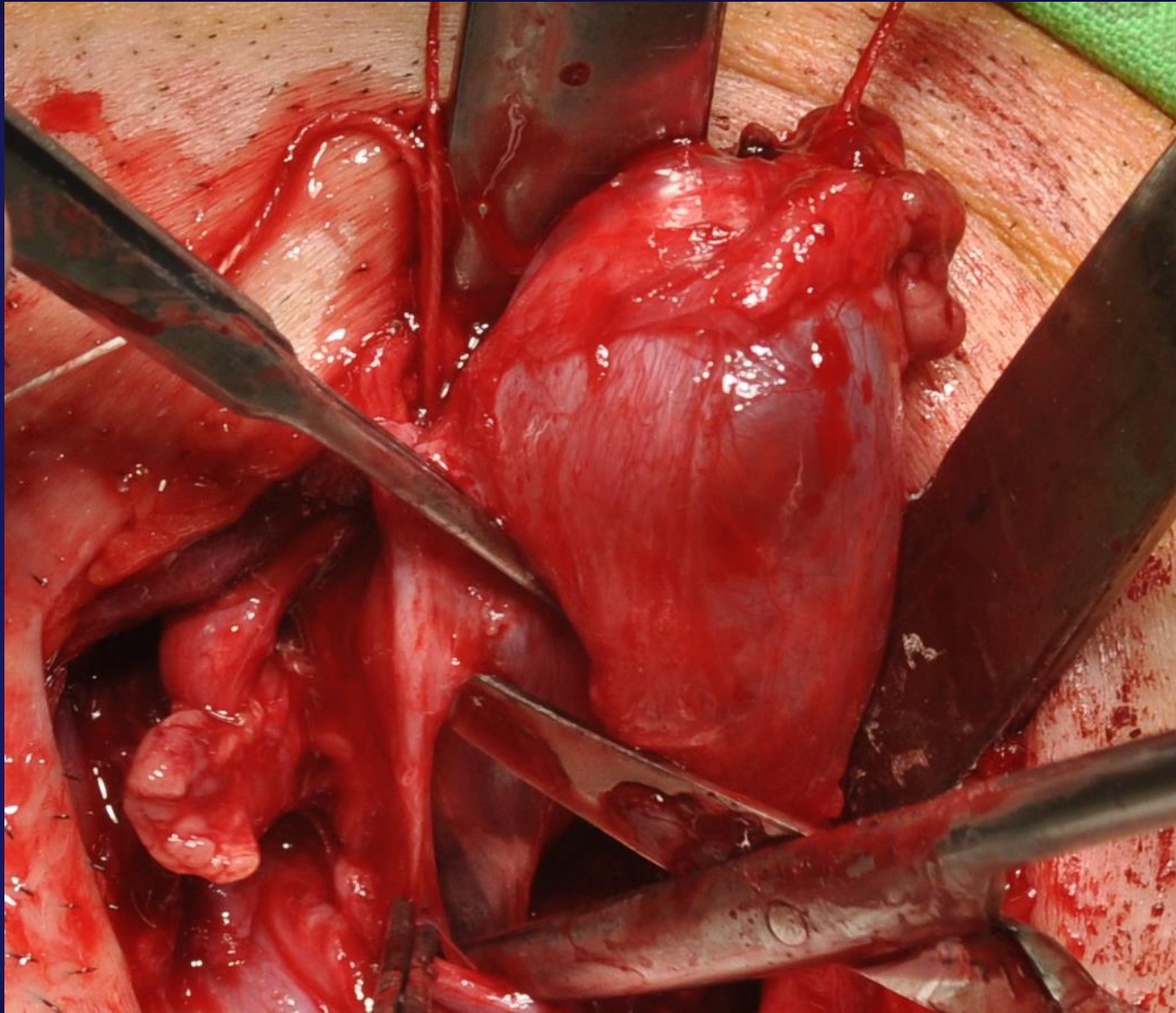


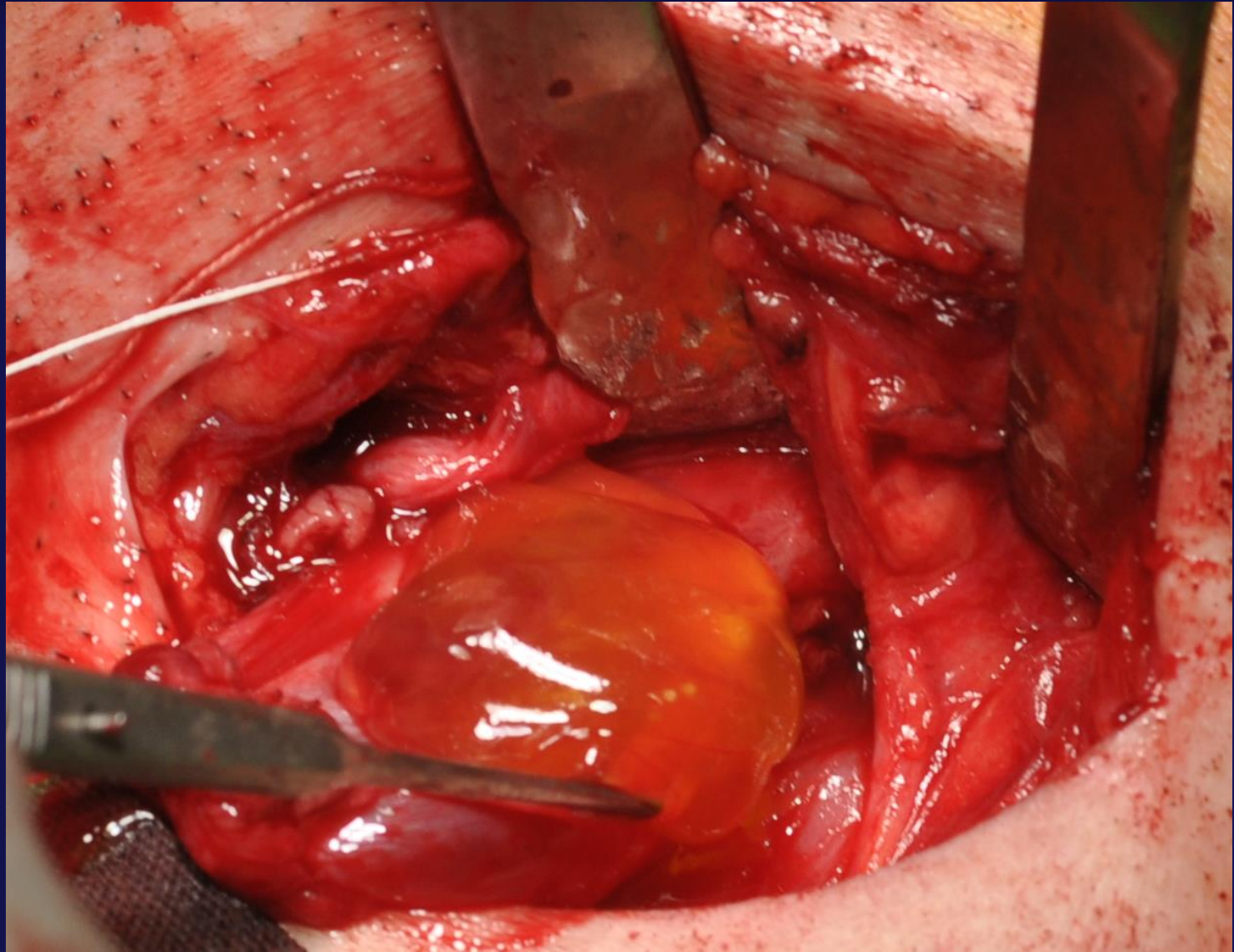
Submandibular gland



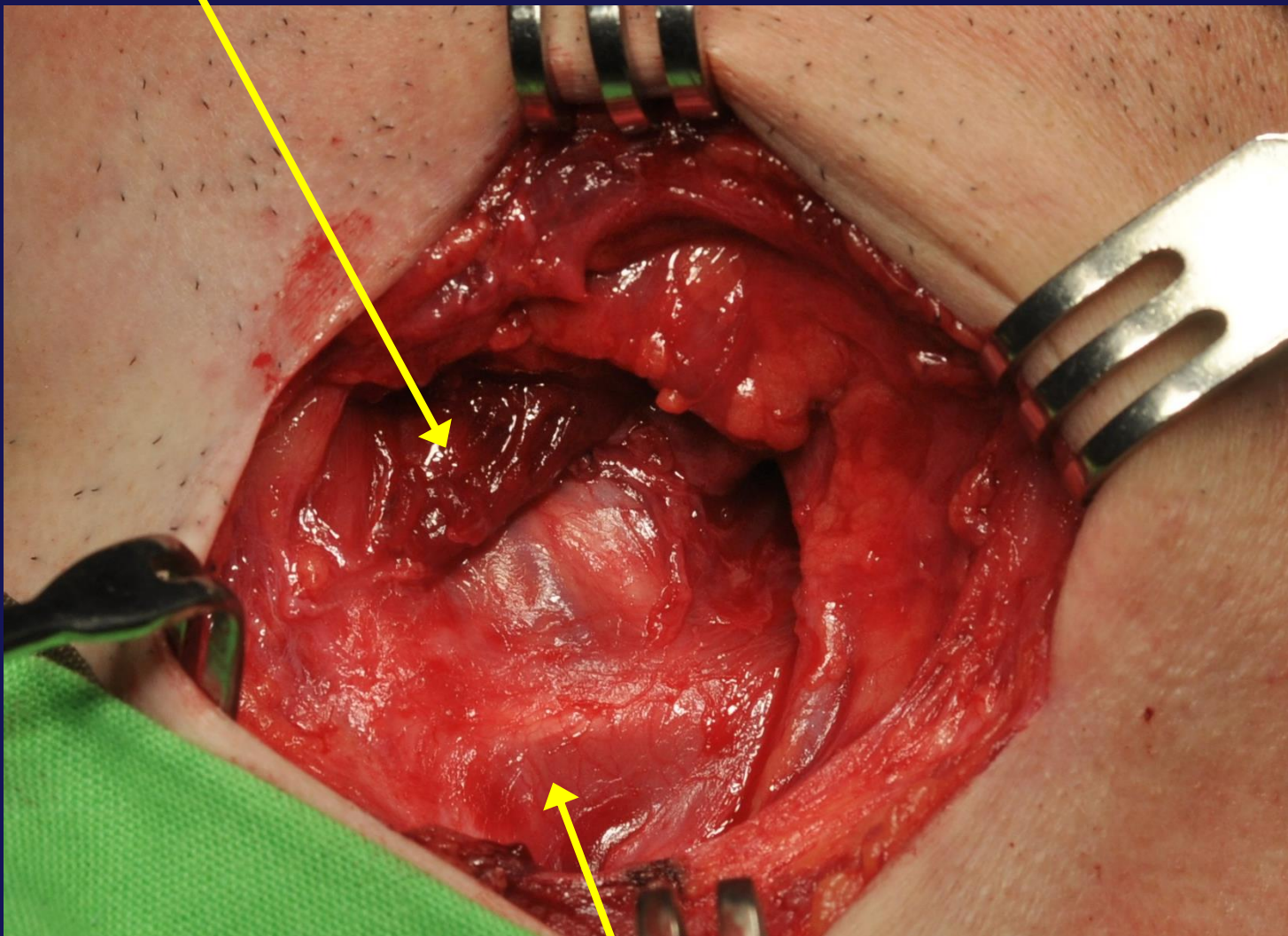
Giant ranula







Mylohyoid muscle



Digastric muscle

Radiography

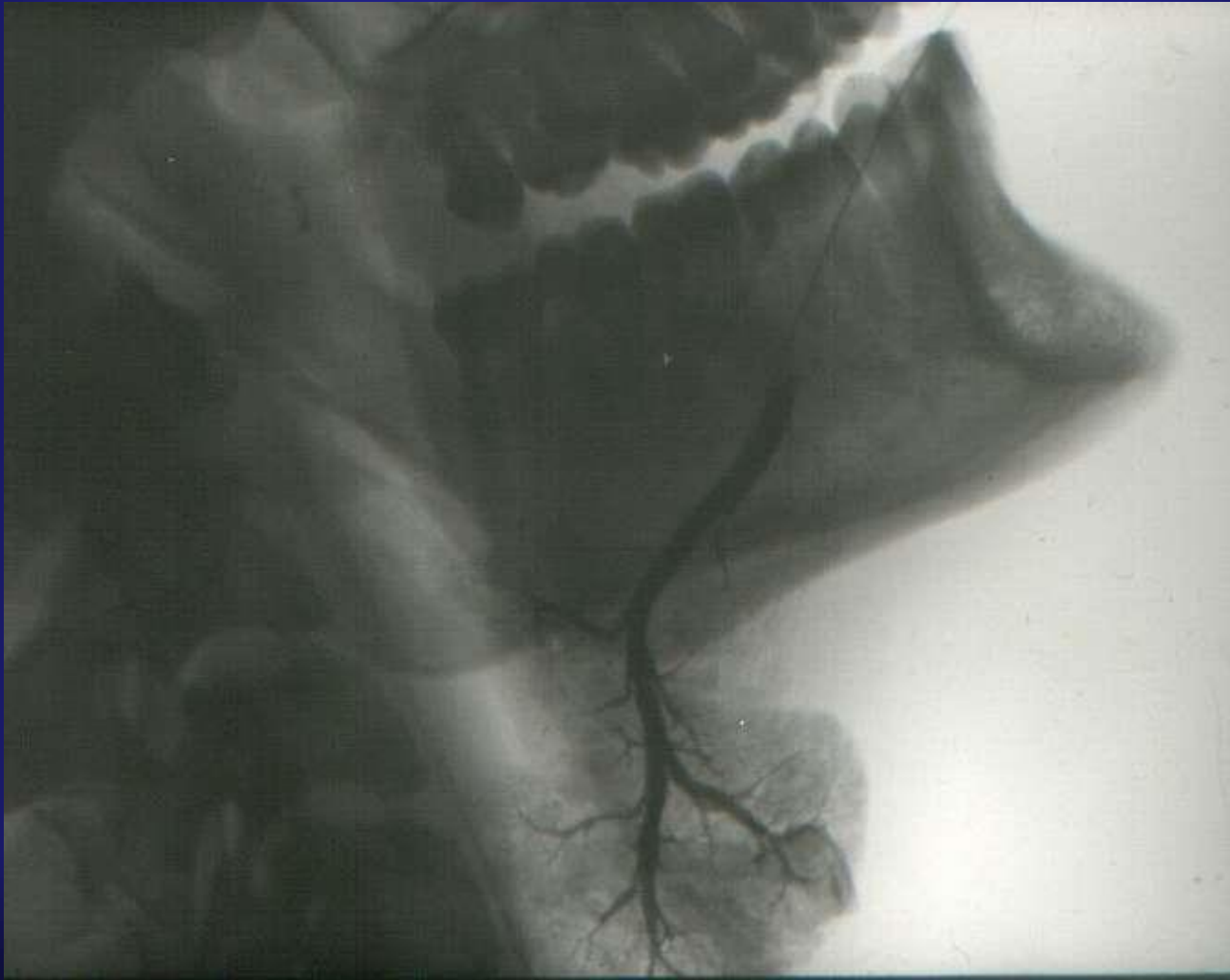
Sialography

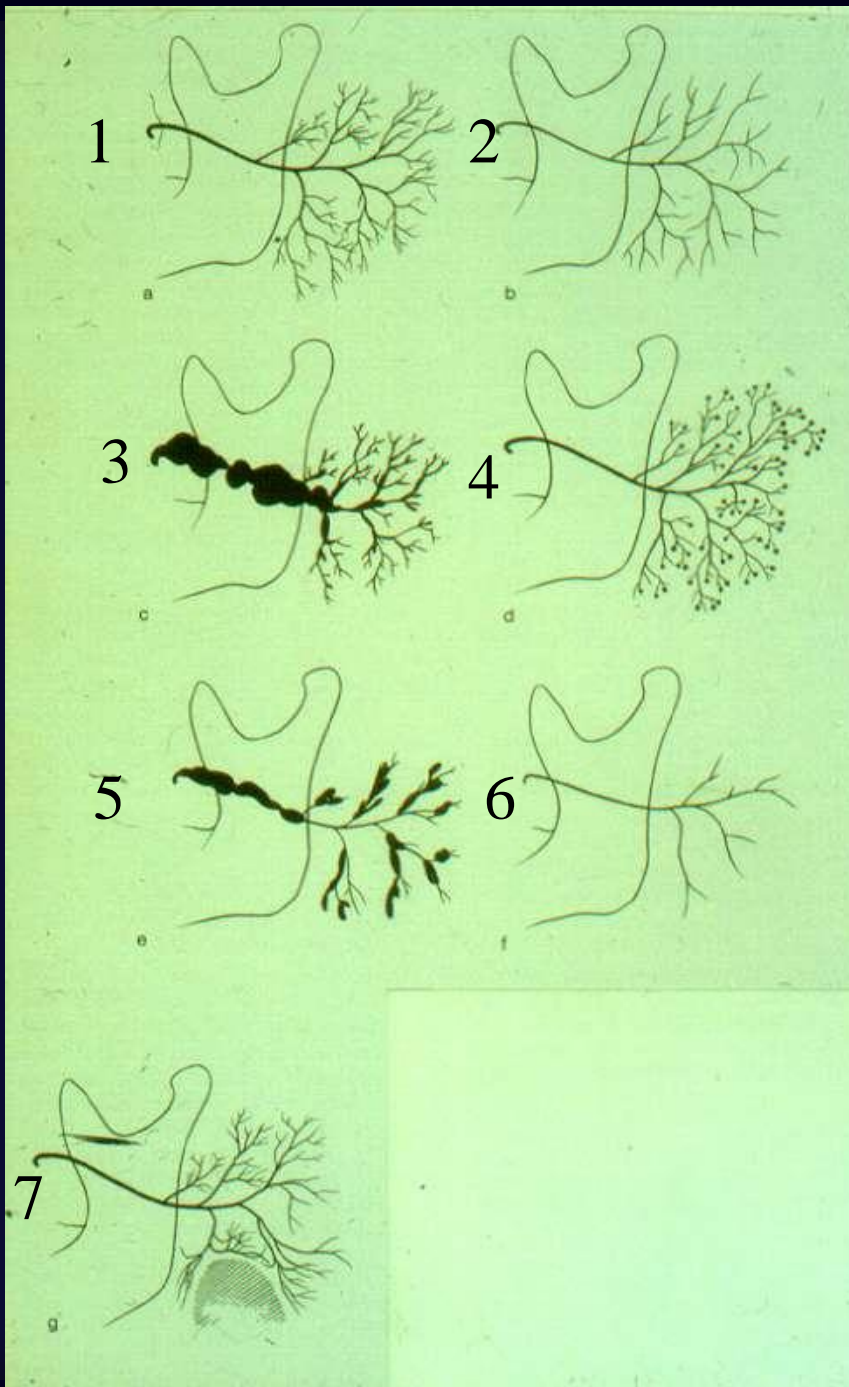
simple X-ray (sialolith)





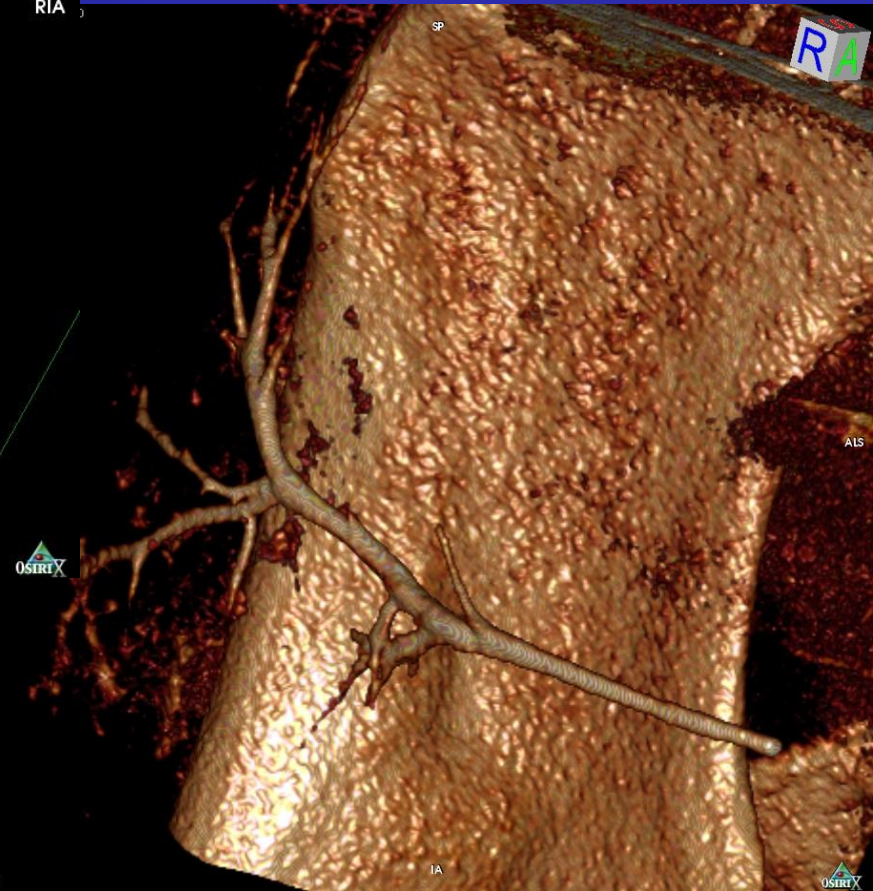
normal submandibular duct system





- 1. normal parotid**
- 2. acute inflammation**
- 3. sialolith**
- 4. chronic recurrent sialadenitis**
- 5. Sjögren sy.**
- 6. sialosis**
- 7. tumor**

Cone Beam Sialography



Study List

Patient Name (by Fi...	Patient ID	Birth Date
------------------------	------------	------------

File Type	Study Date-Time	Res	FOV
CT	07/26/2012 09:57	0.250	

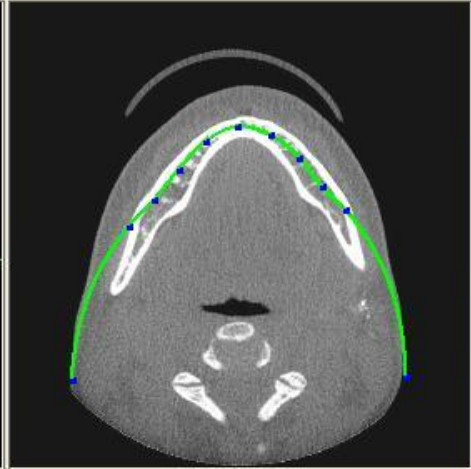
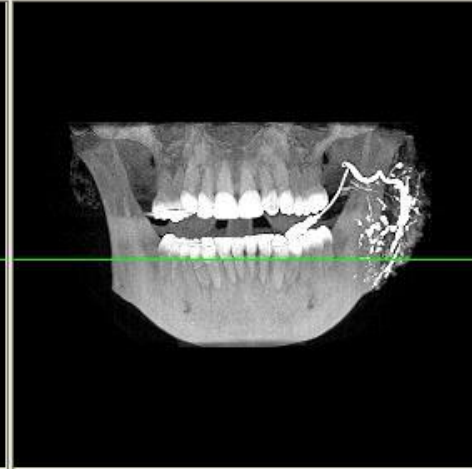
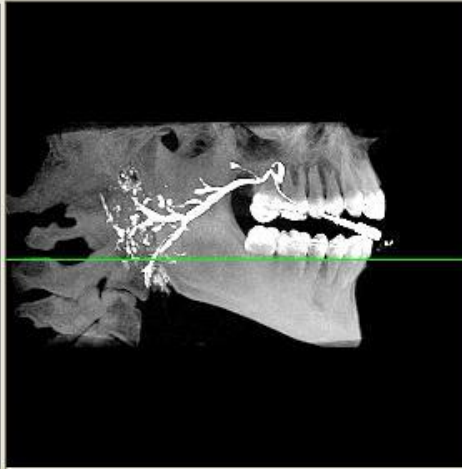
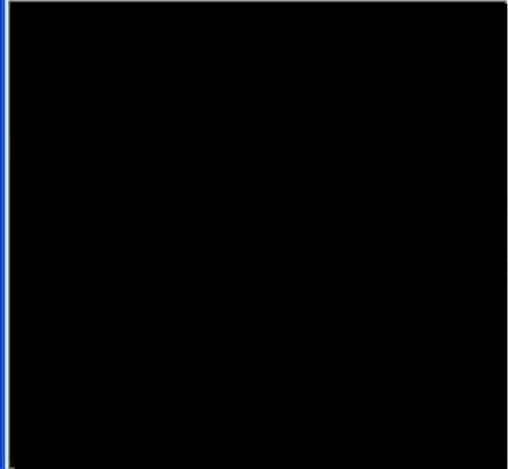
Select Study Date

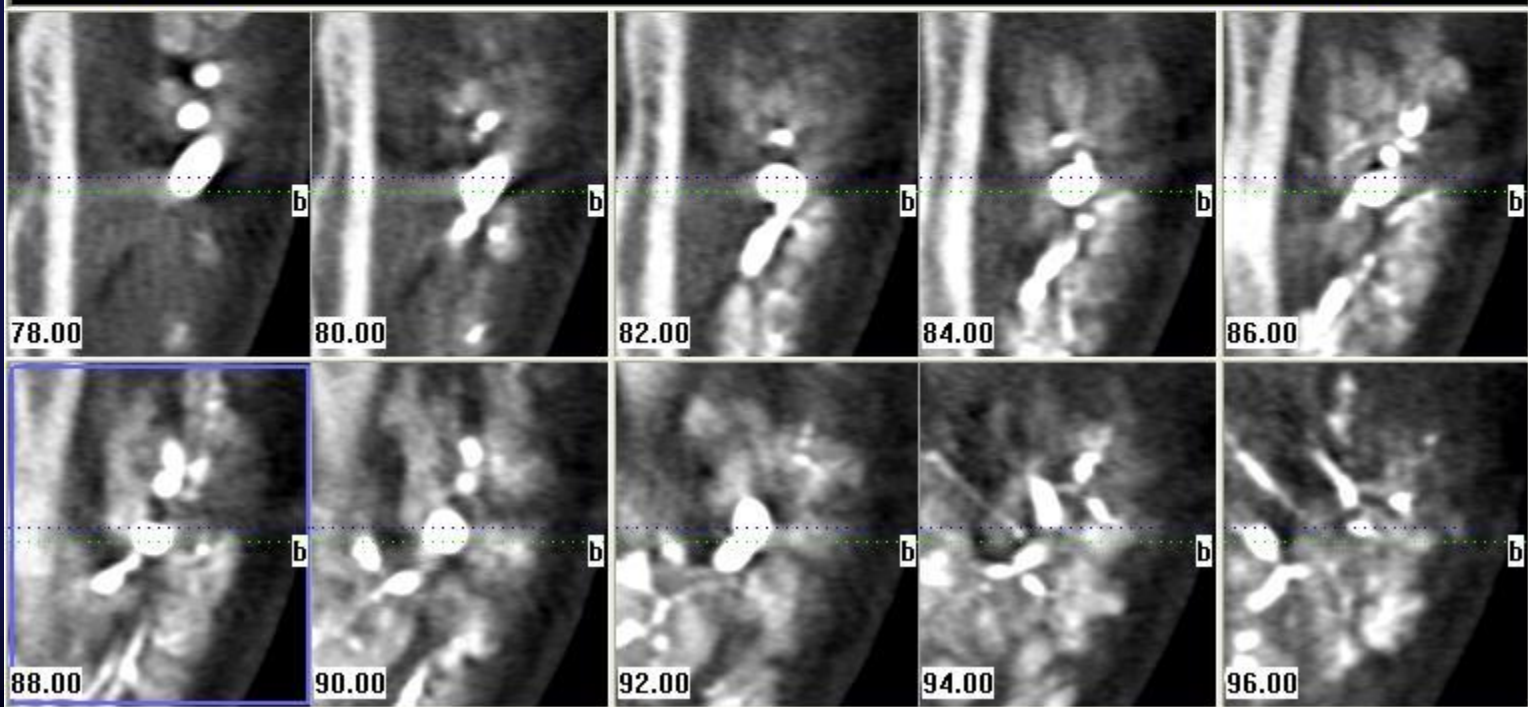
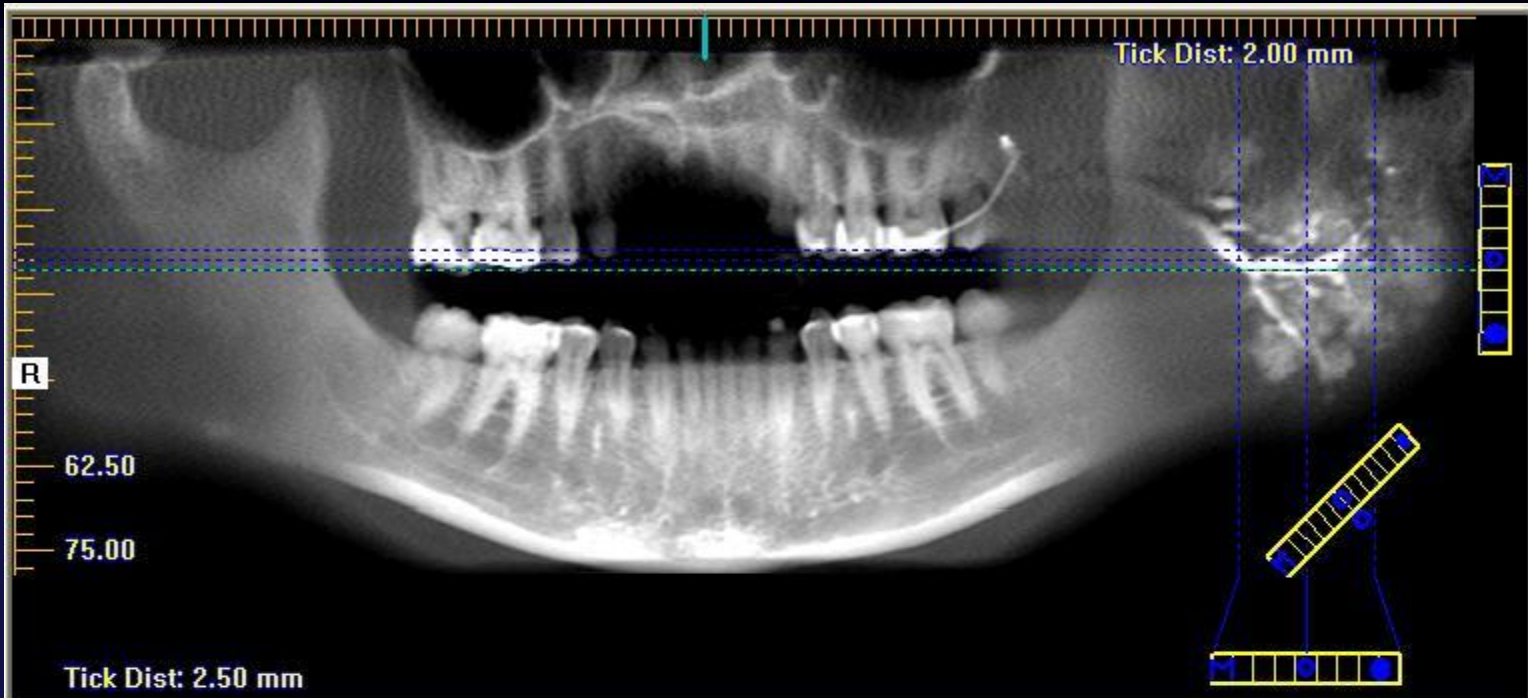
Panoramic View

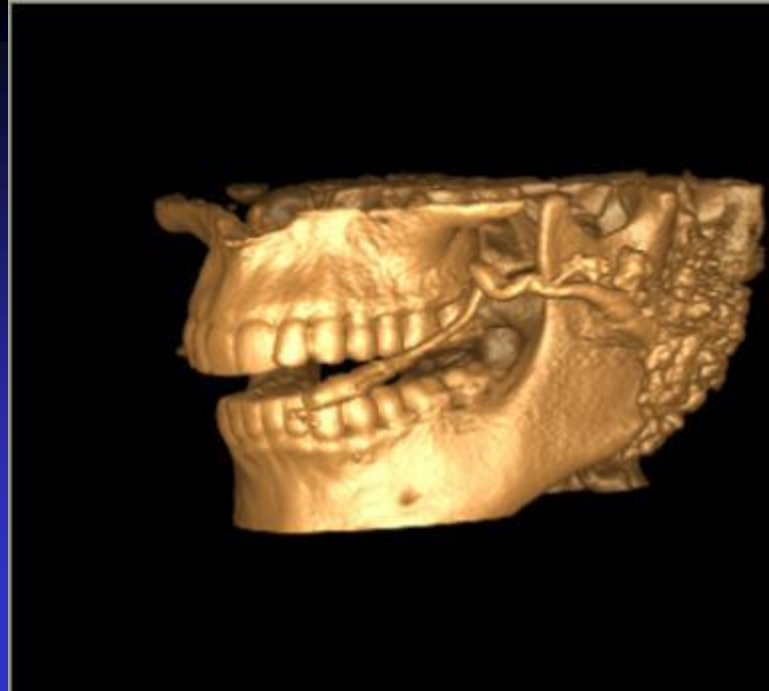
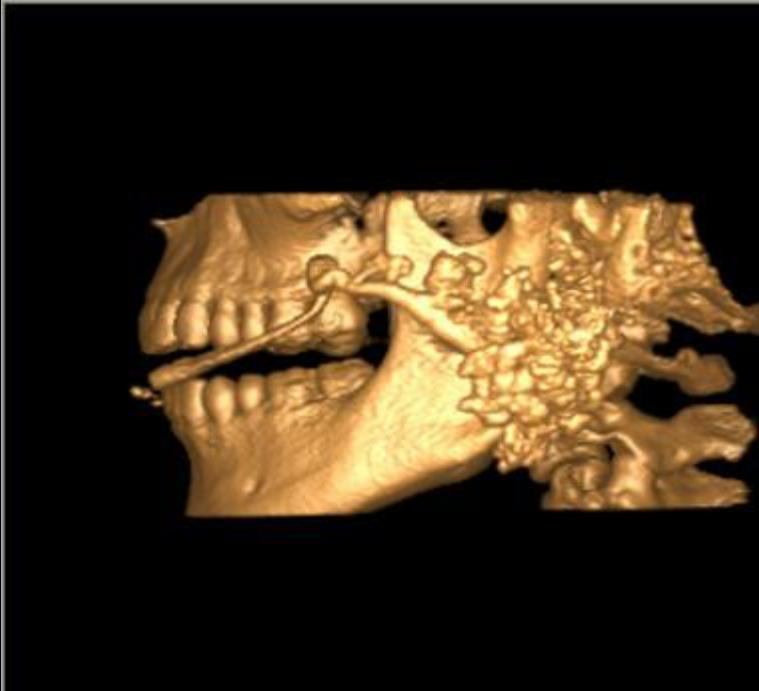


Study Information

Volume of Interest

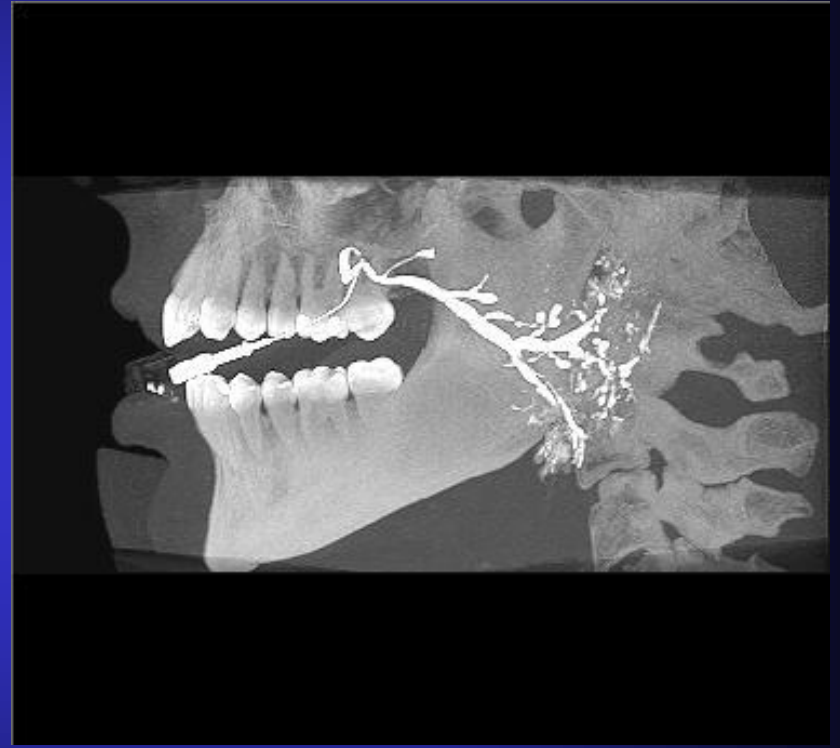
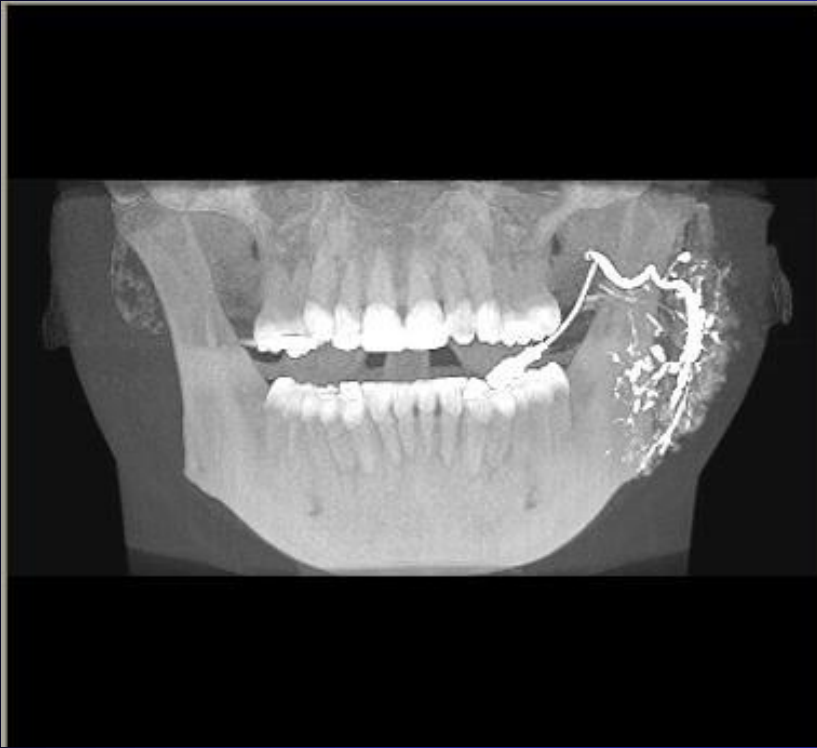






Sjögren
syndrome

Sjögren syndrome



Isotop examinations

^{131}I

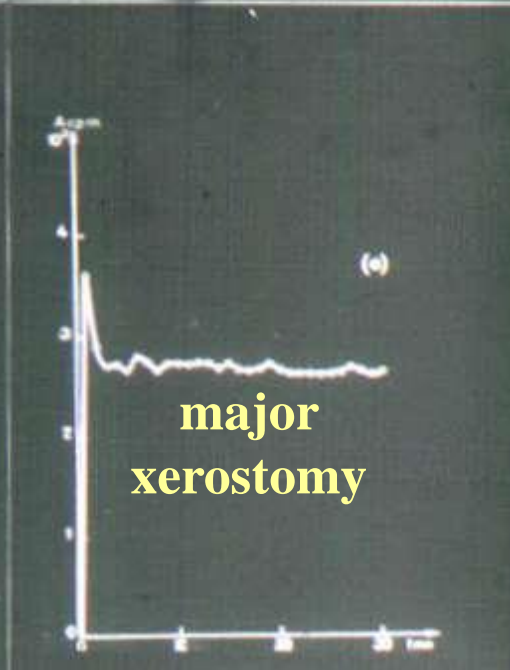
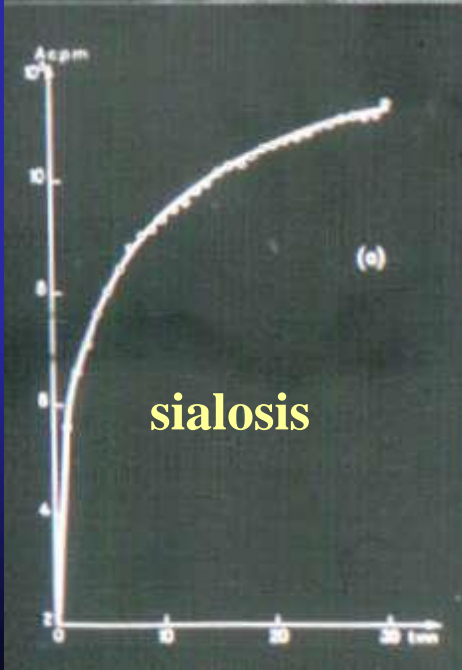
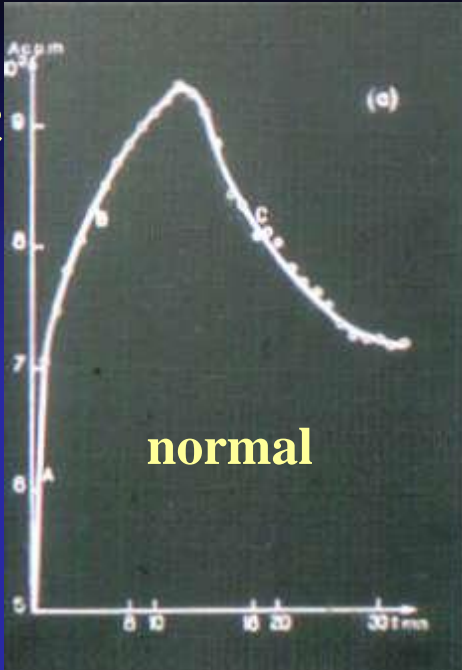
$^{99\text{m}}\text{Tc}$

Half-
life

8 days

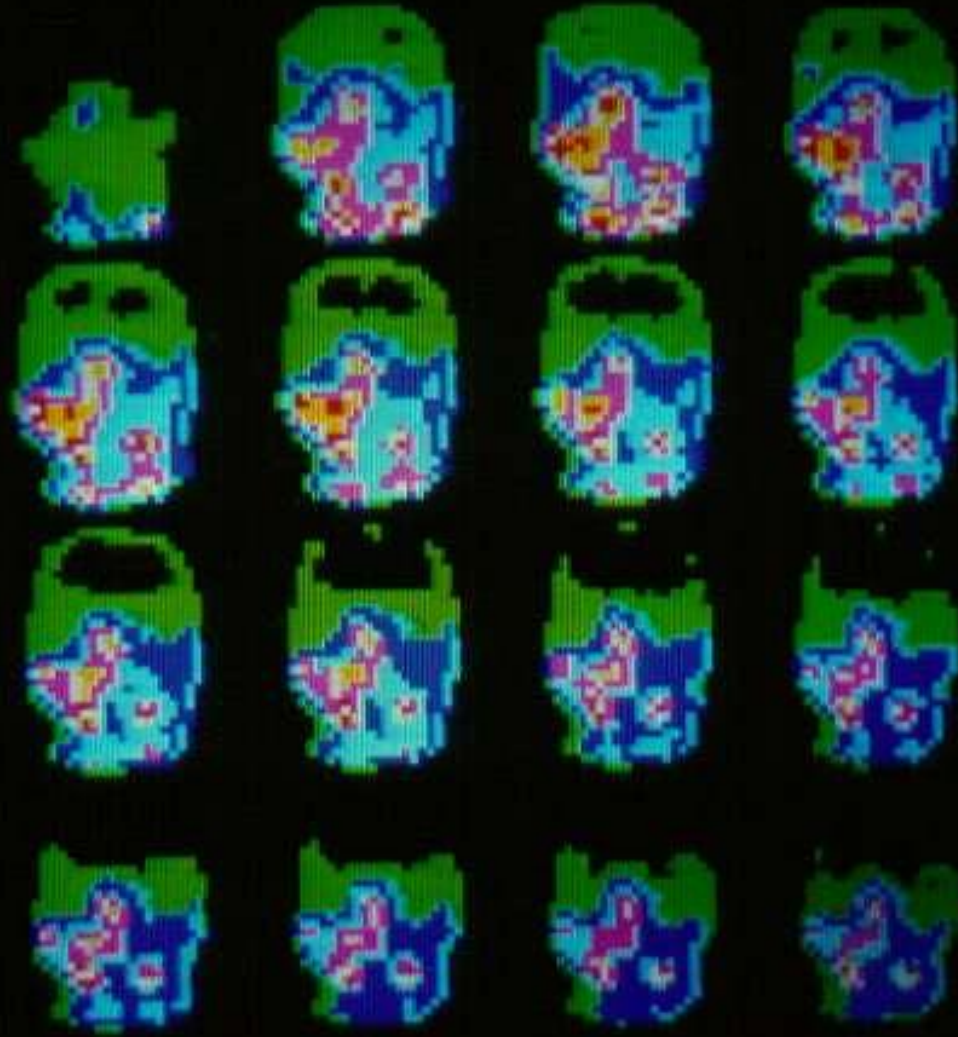
6 hours

Characteristic curves

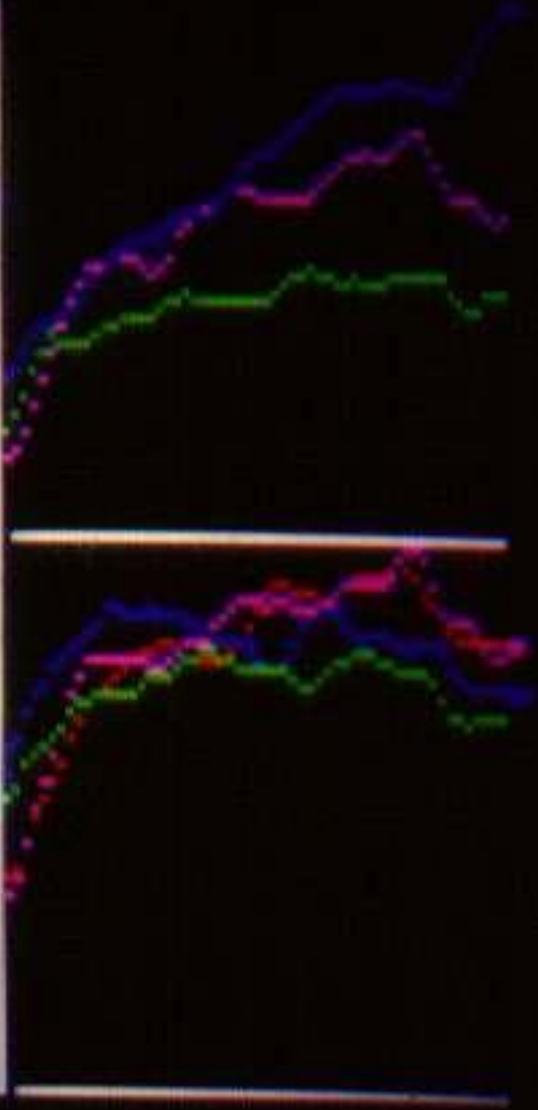
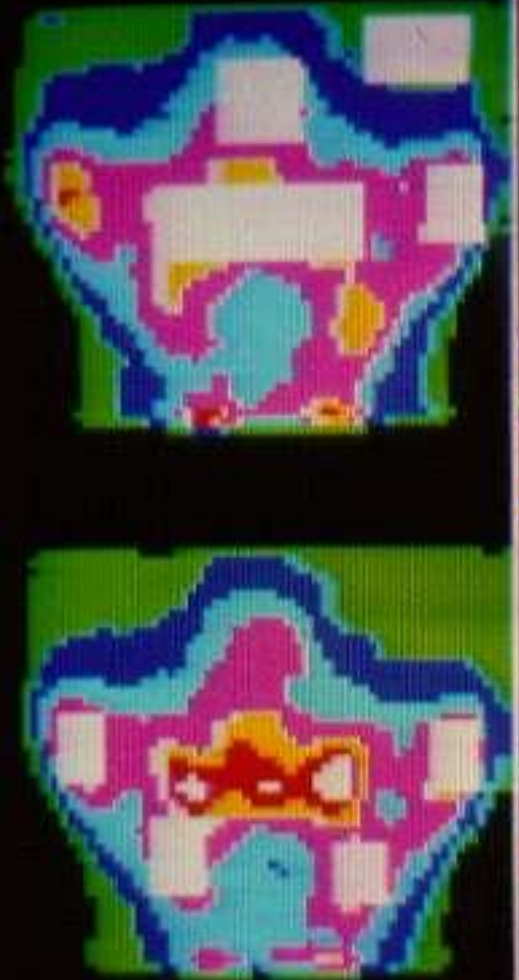


502203-H0110

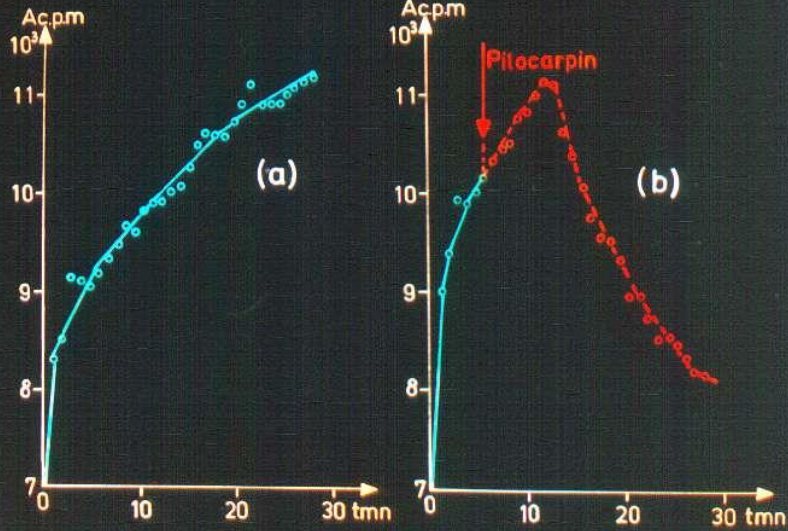
200000



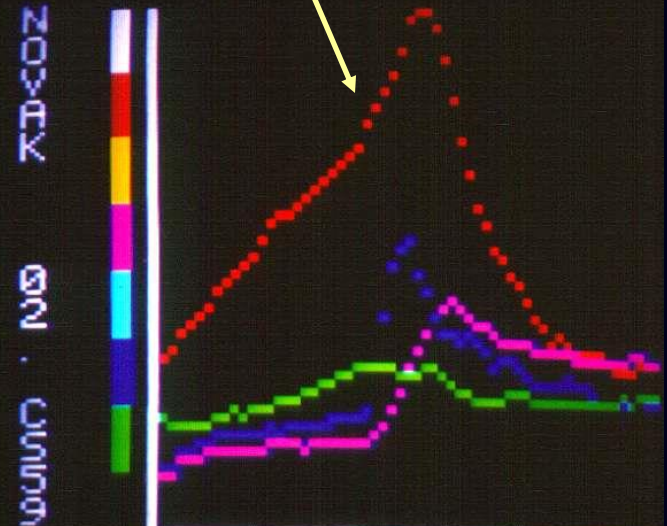
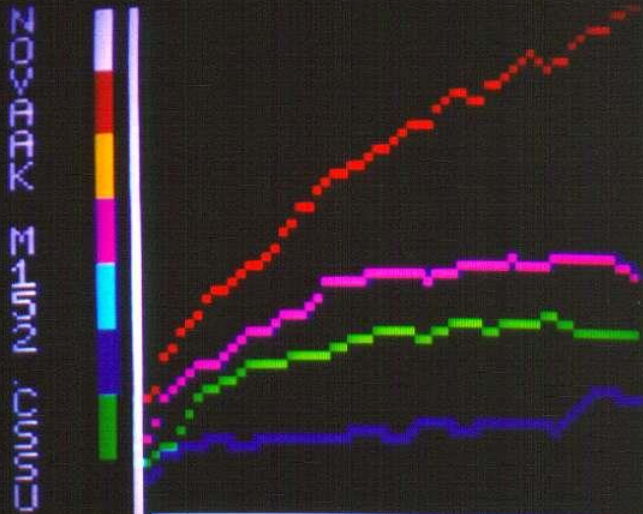
СРЕДНИЙ · ПОСРЕДСТВЕННЫЙ



Effect of Pilocarpine on salivary secretion



P



Malformations

Aplasia-hyperplasia

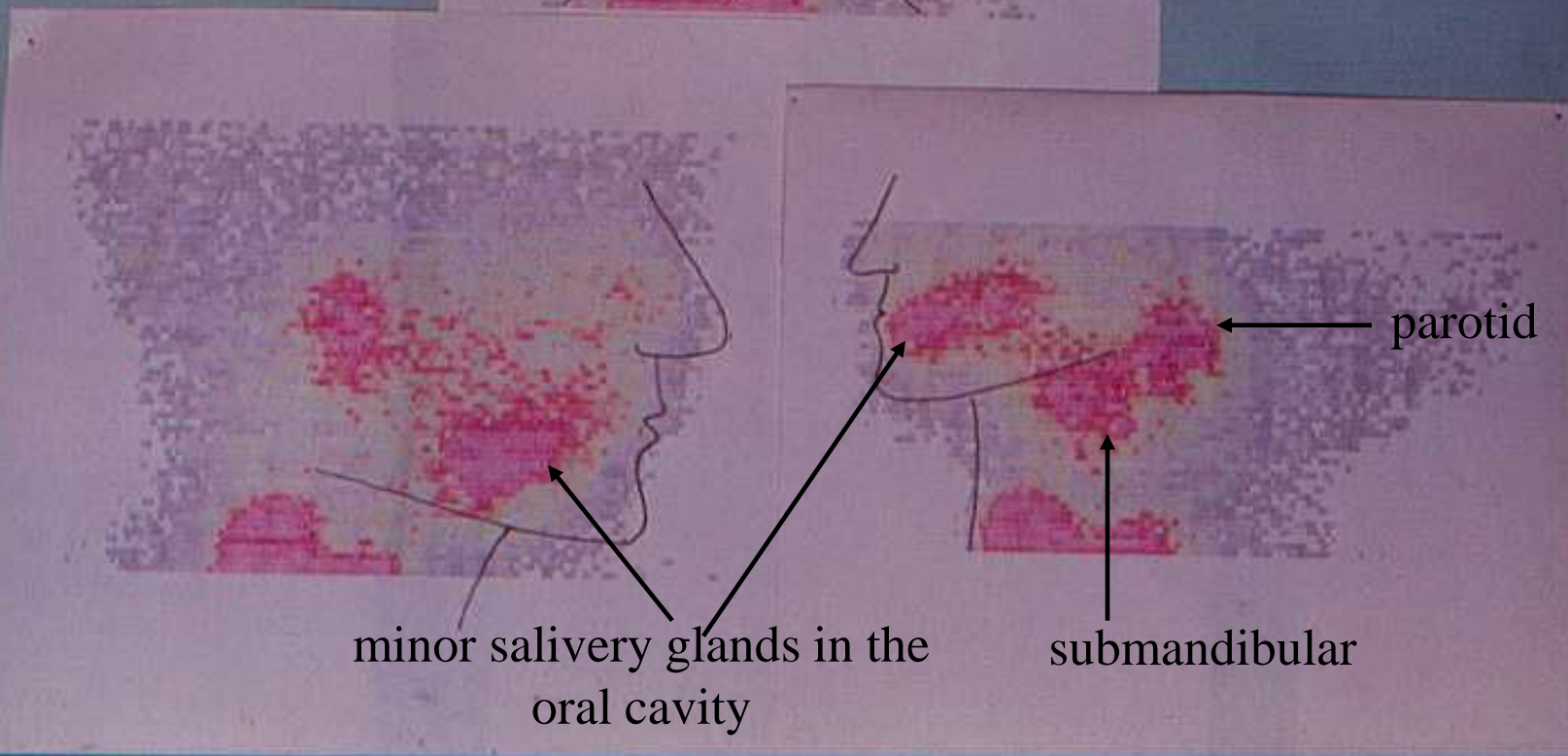
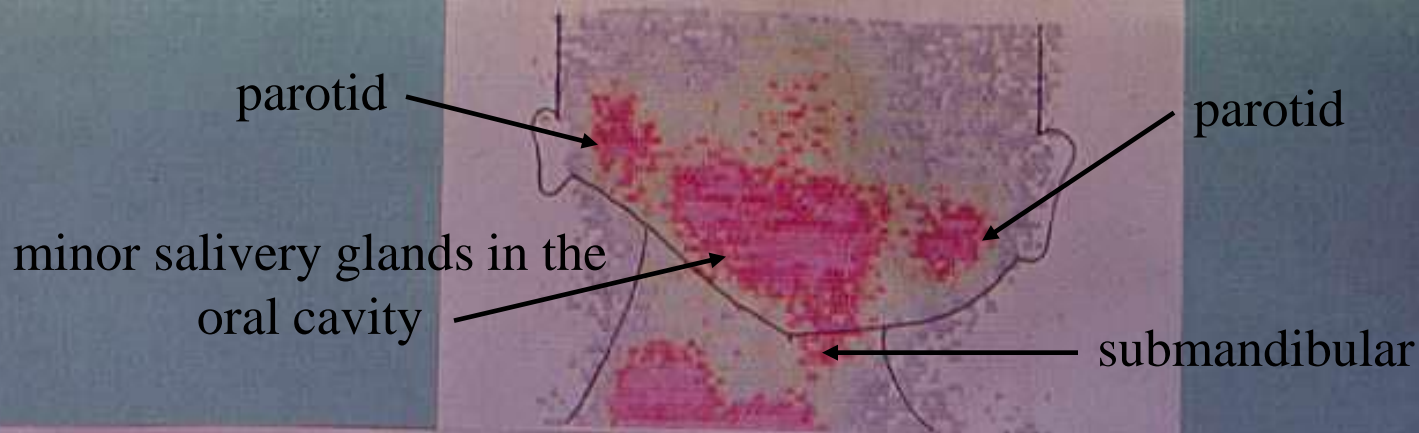
Metaplasia

Abnormal development of the ducts

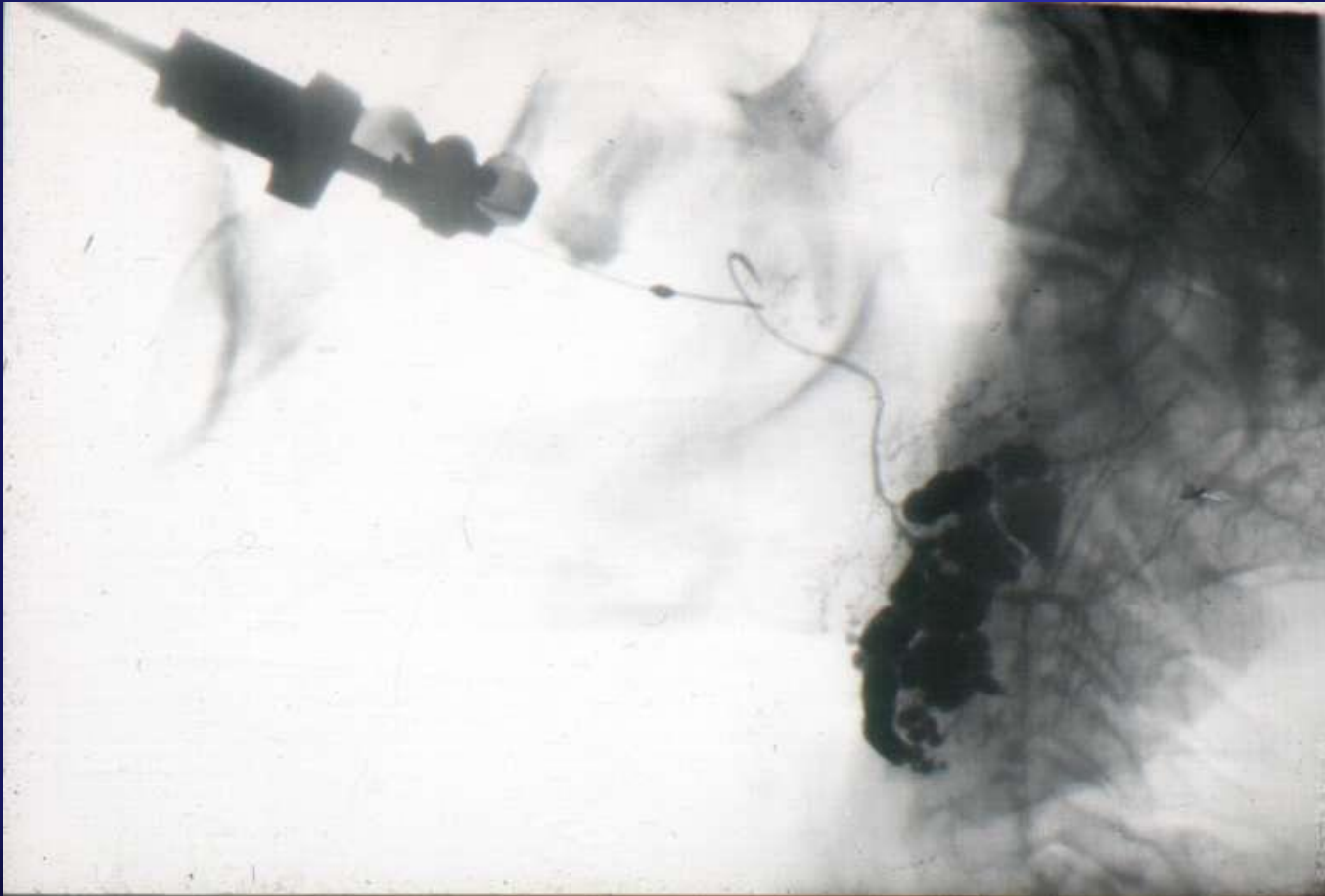
Aplasia of the right submandibular gland

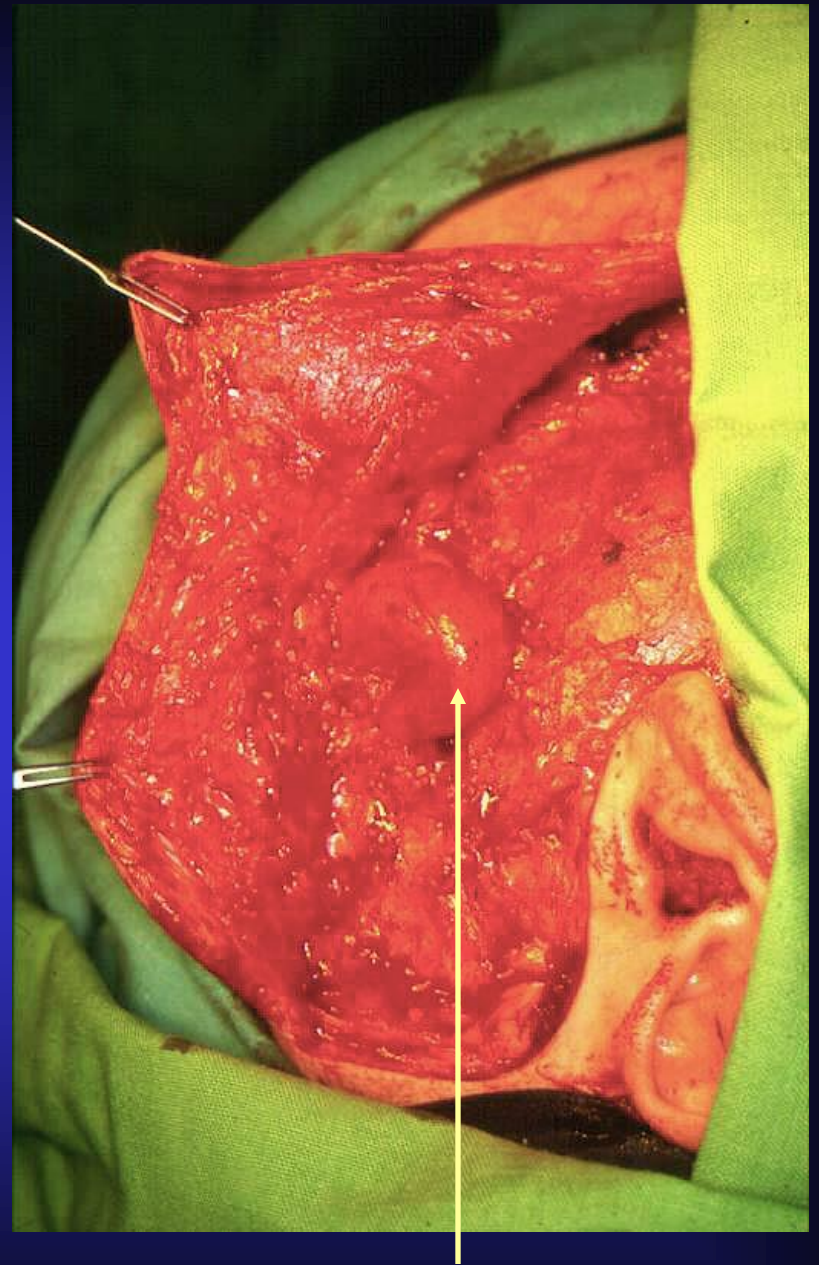


Aplasia of the right submandibular gland



Abnormal development of the parotid ducts





Abnormal development of the parotid duct: „mega-Stenon”

Inflammations

Chronic recurrent sialadenitis

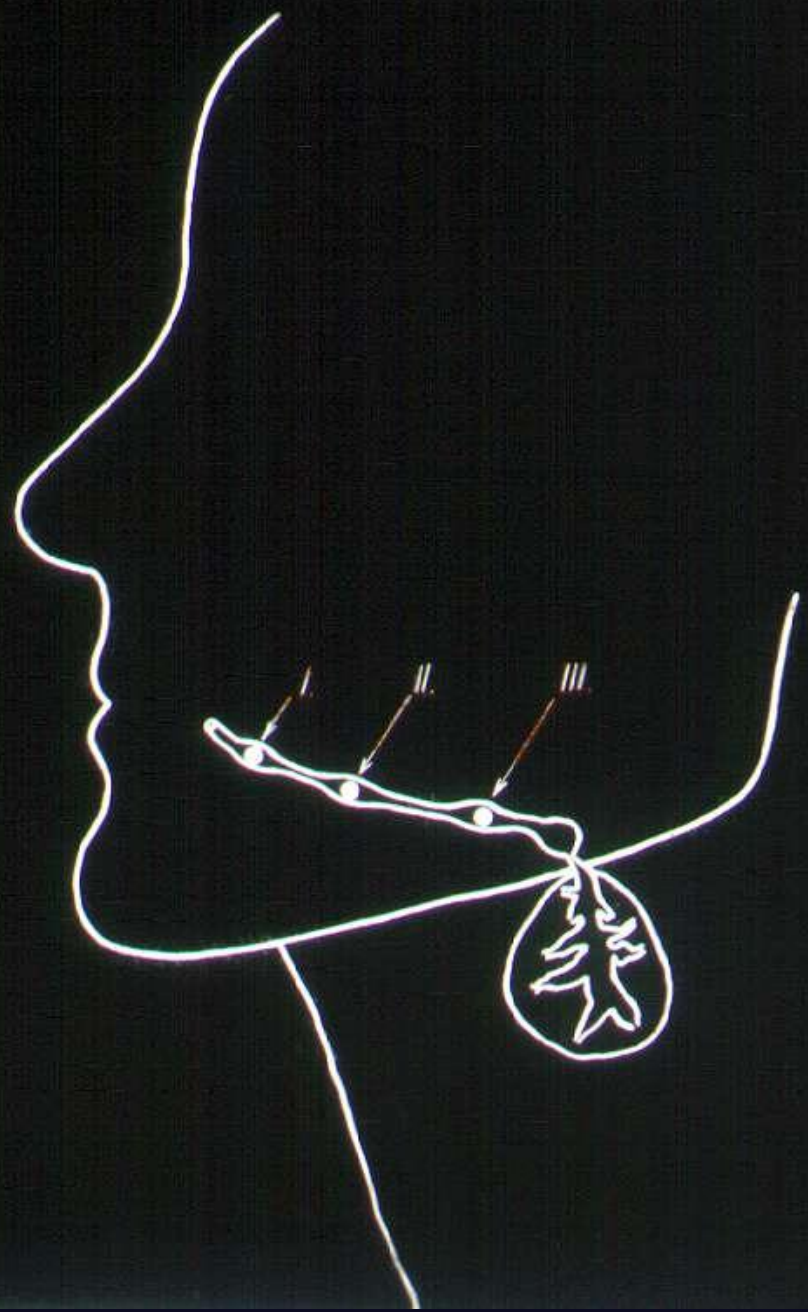


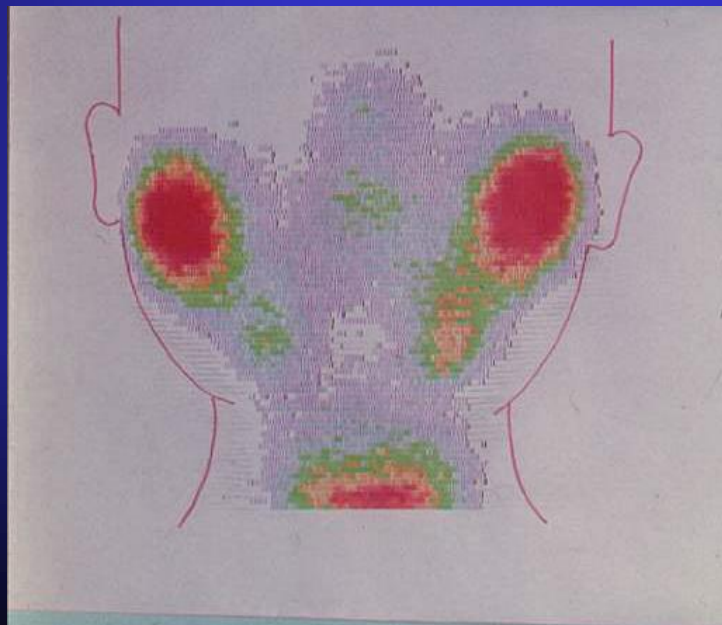
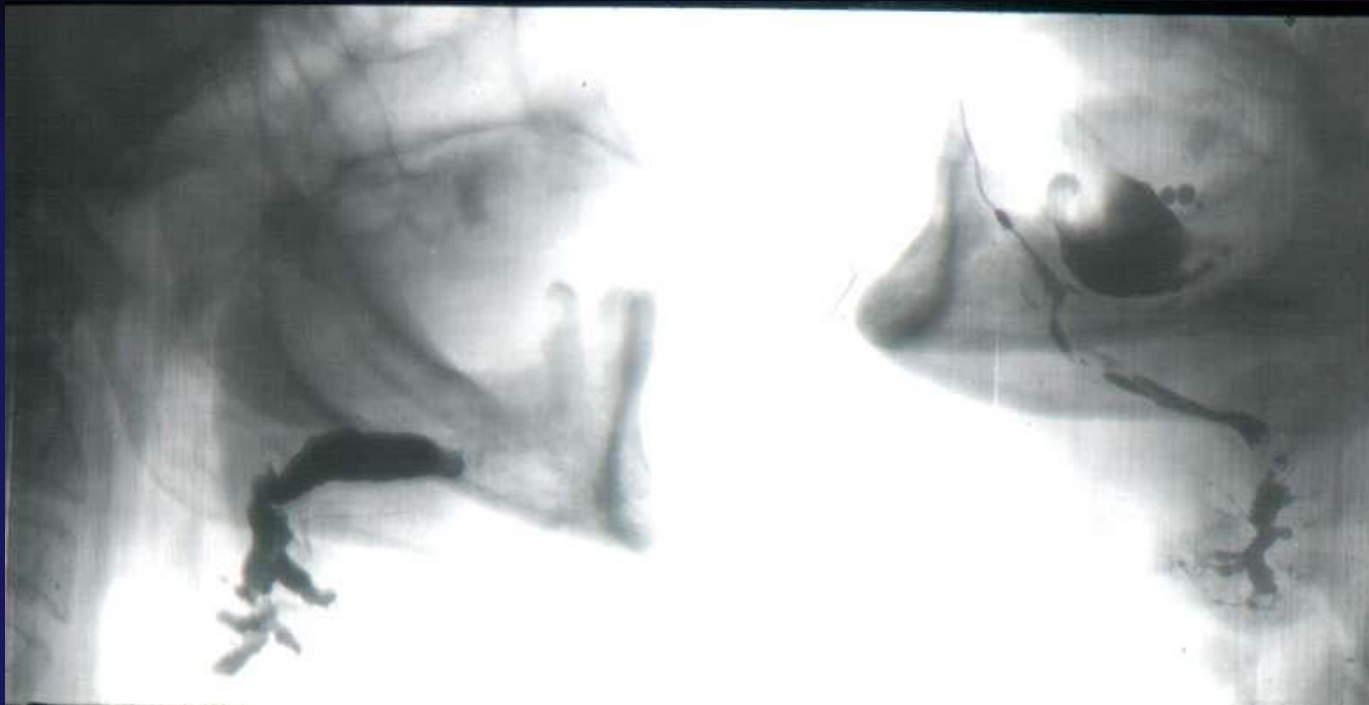
Chronic recurrent sialadenitis



Sialoliths







**Bilateral sialolithiasis
of the submandibular
glands**

Tumors

Tumors of the salivary glands

Pleomorphic adenoma (mixed tumor)

Adenolymphomas (cystadenolymphoma)

Oncocytoma

Cylindroma (Adenocystic carcinoma)

Mucoepidermoid tumors

Malignant mixed tumor

Epithelial carcinoma

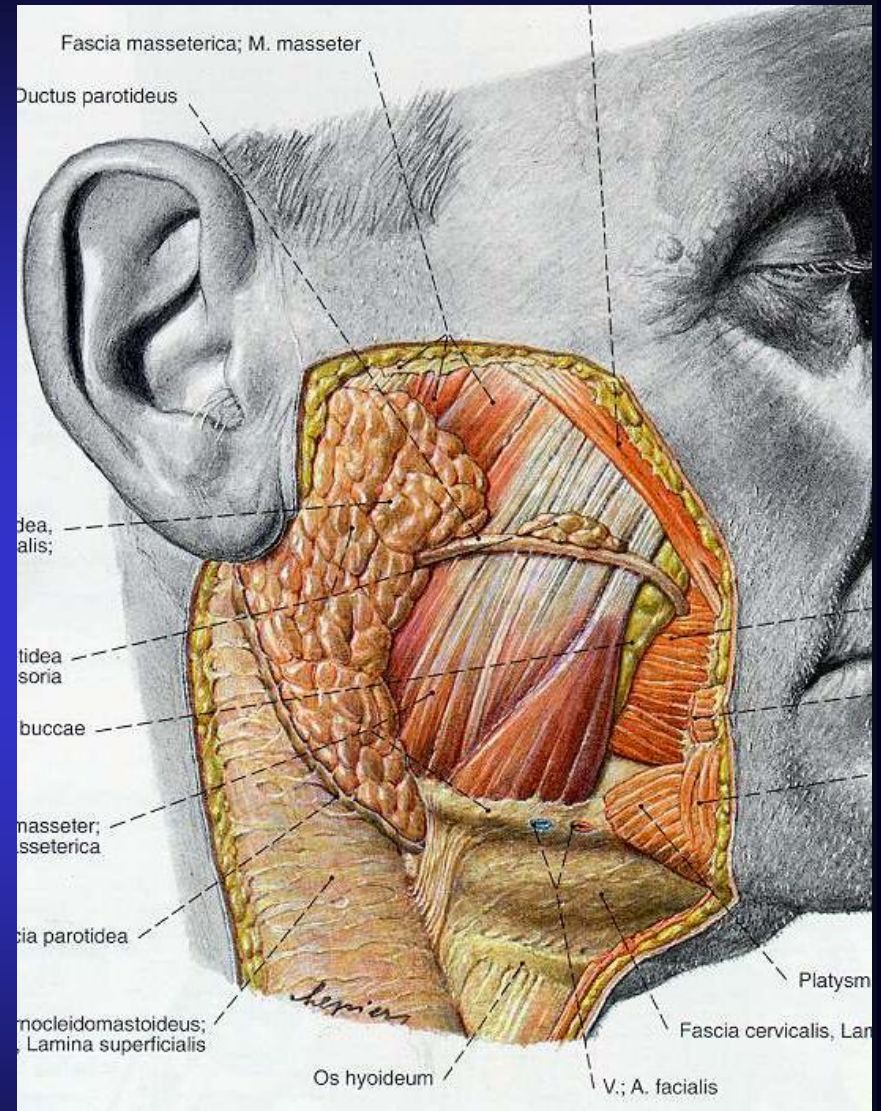
Adenocarcinoma

Pleomorphic adenoma



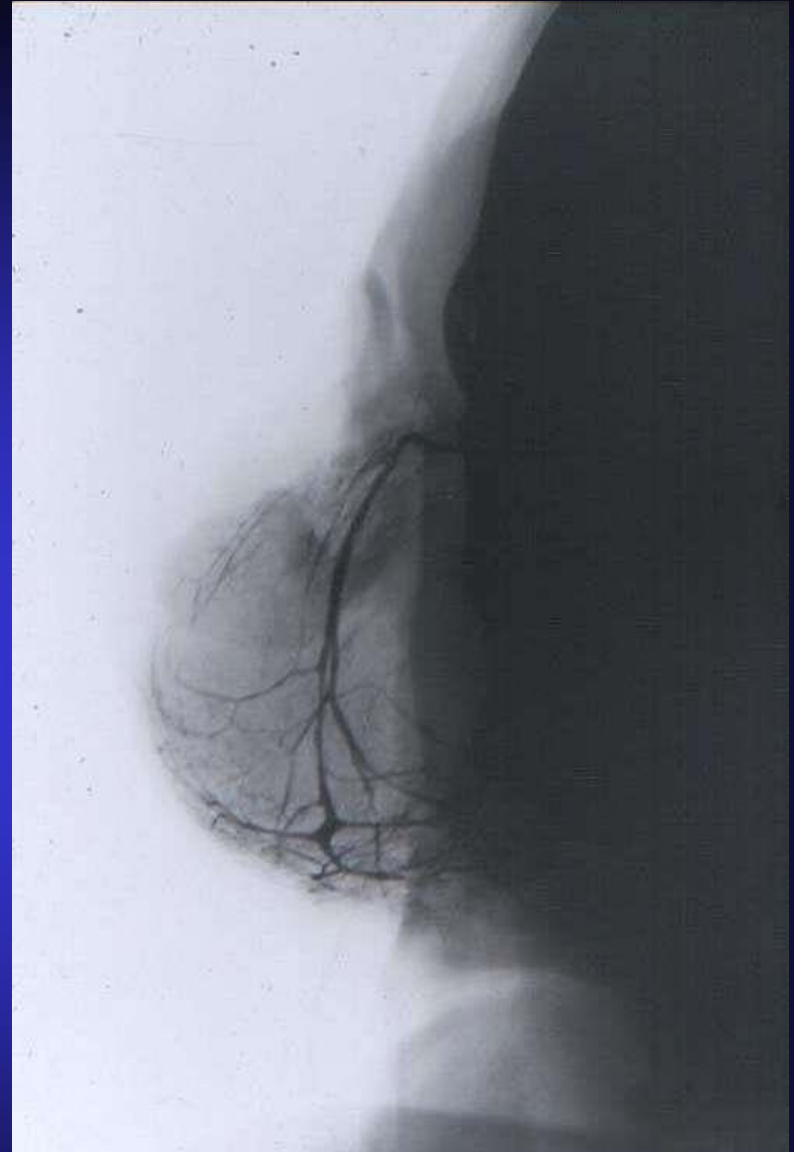


Frey sy. (Auriculotemporal nerv.)



Tumor of the accessory parotid gland





Pleomorphic adenoma



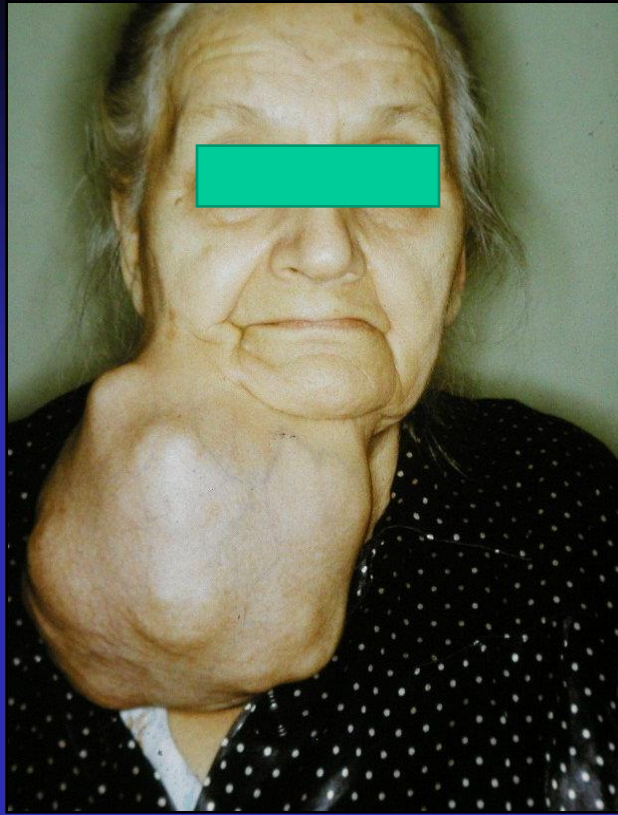
**Pleomorphic adenoma
one week postop.**



**Pleomorphic adenoma
92 year old patient**









**12 years later mixed
tumor in the upper lip**

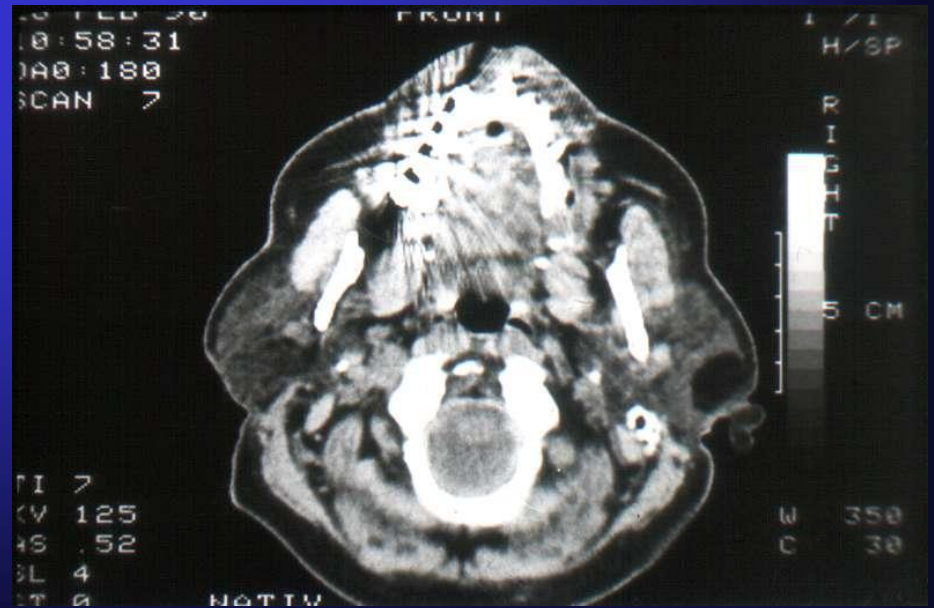


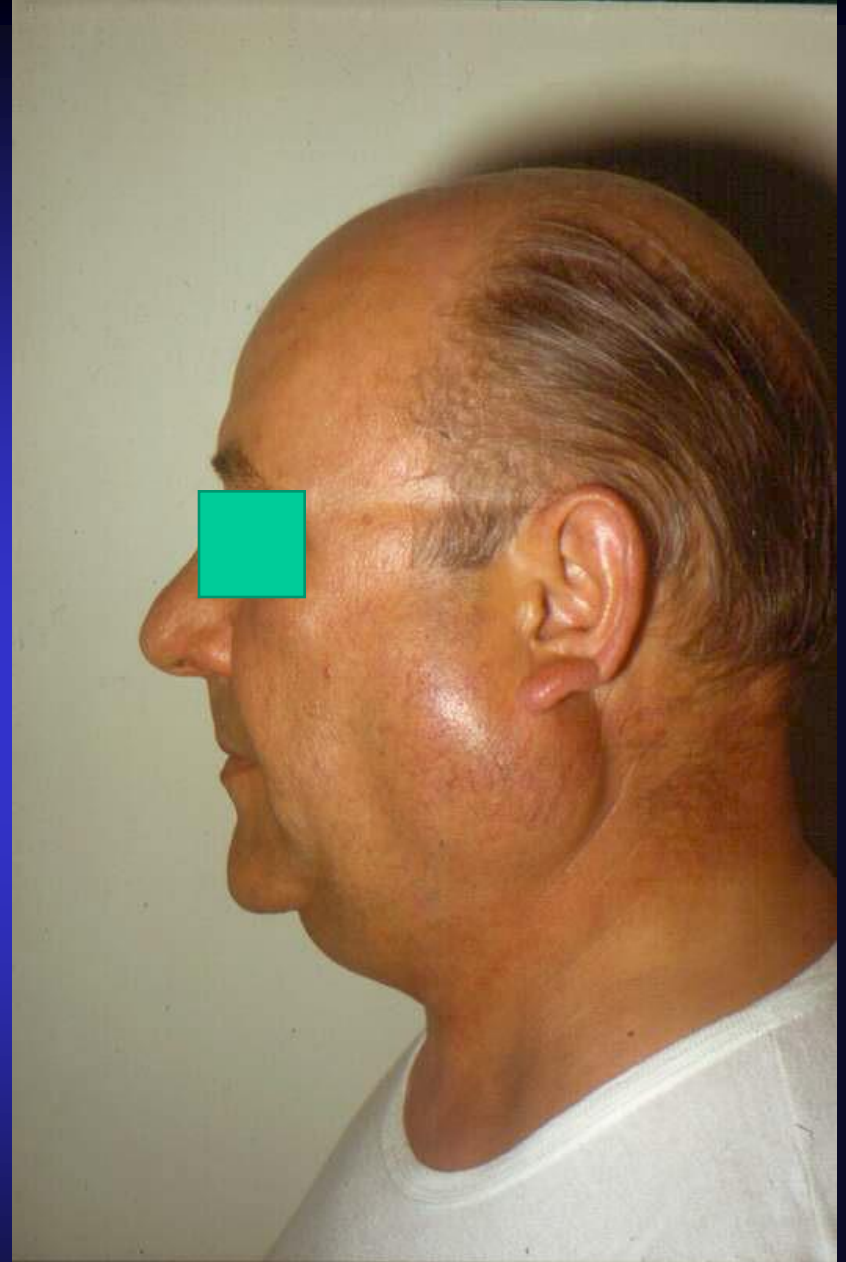
102 years old patient with parotid mixed tumor



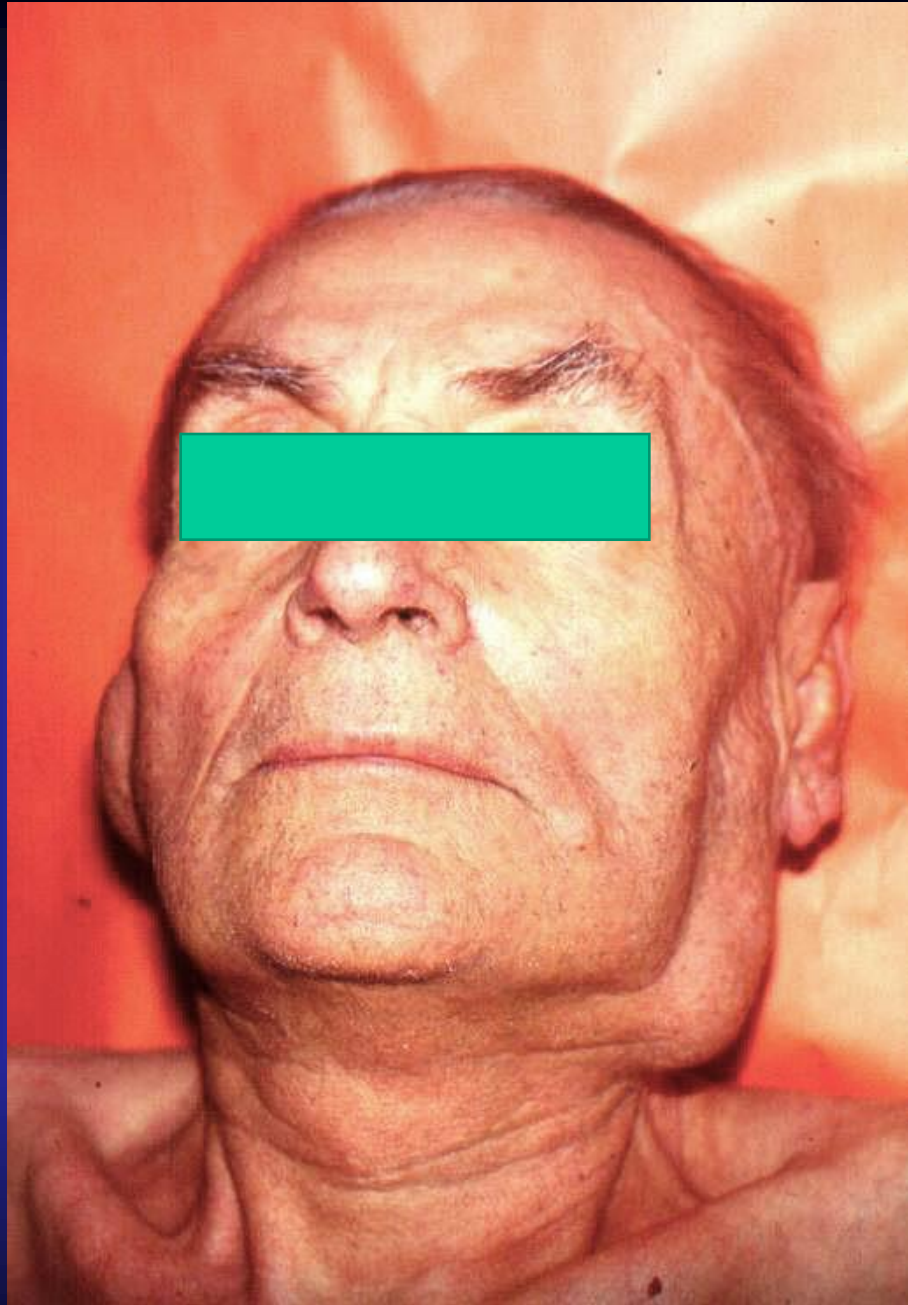
Pleomorphic adenoma in the submandibular gland

Oncocytoma in the parotid gland

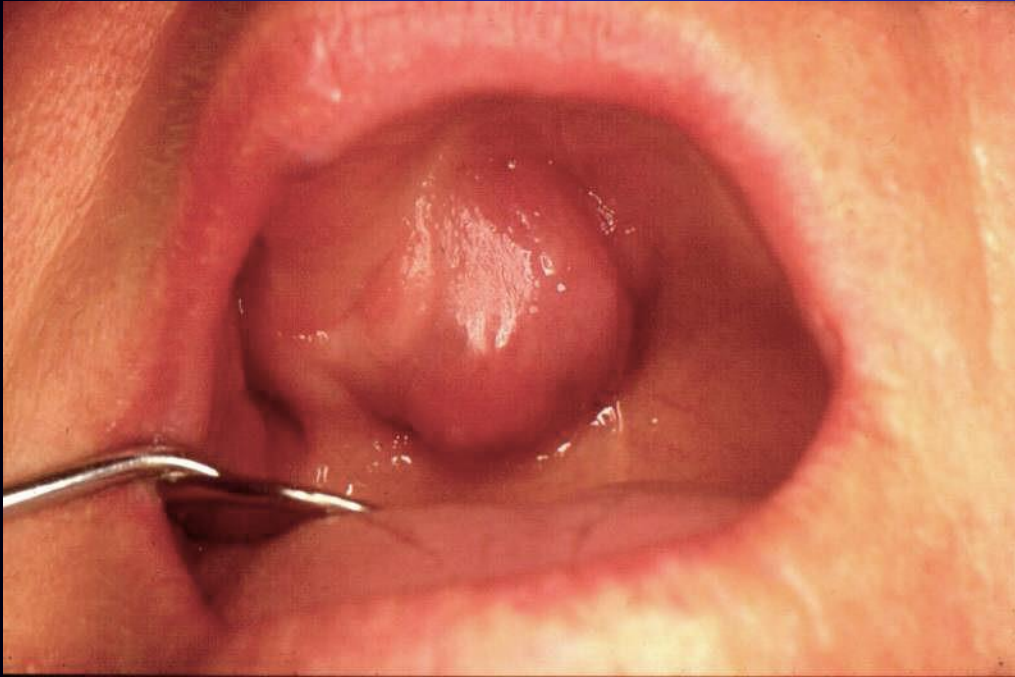




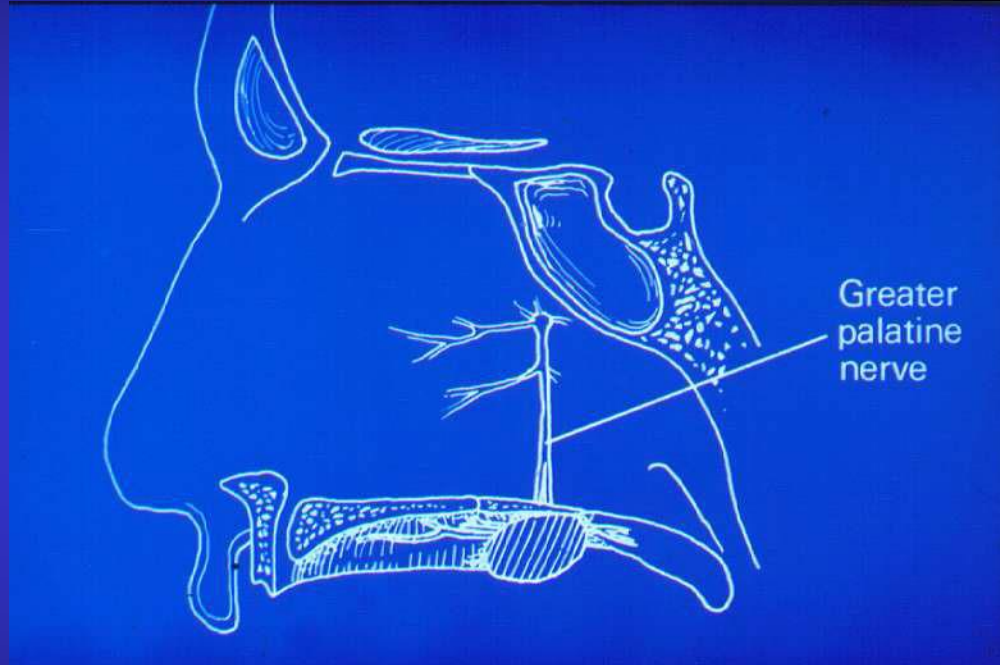
Cystadenolymphoma in the parotid gland



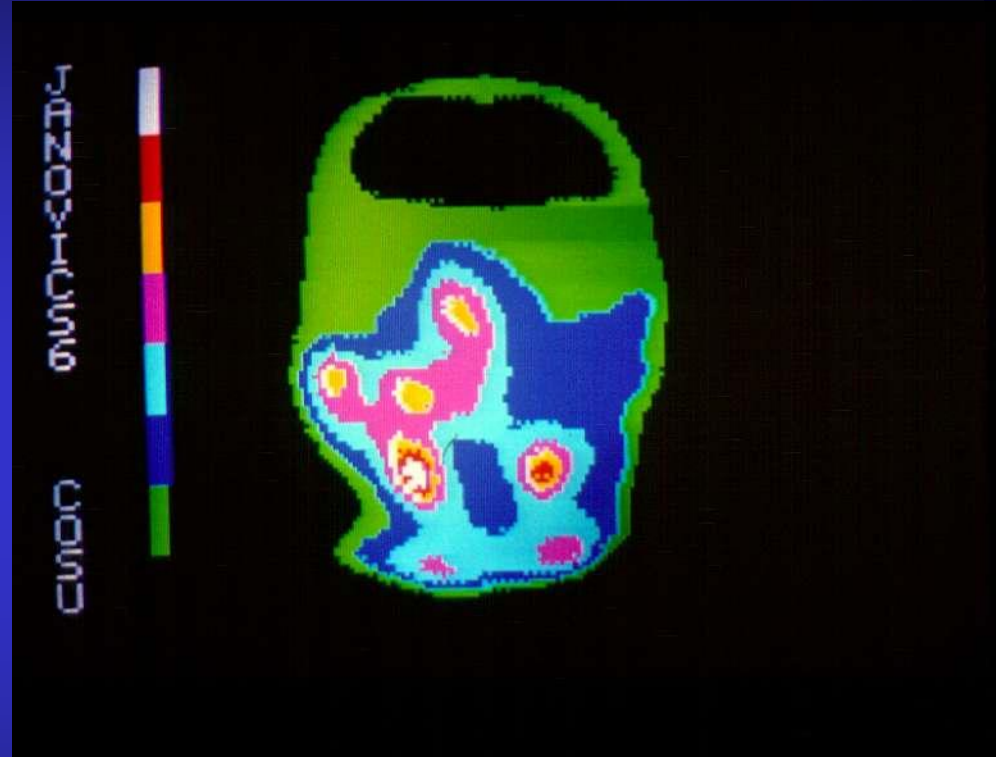
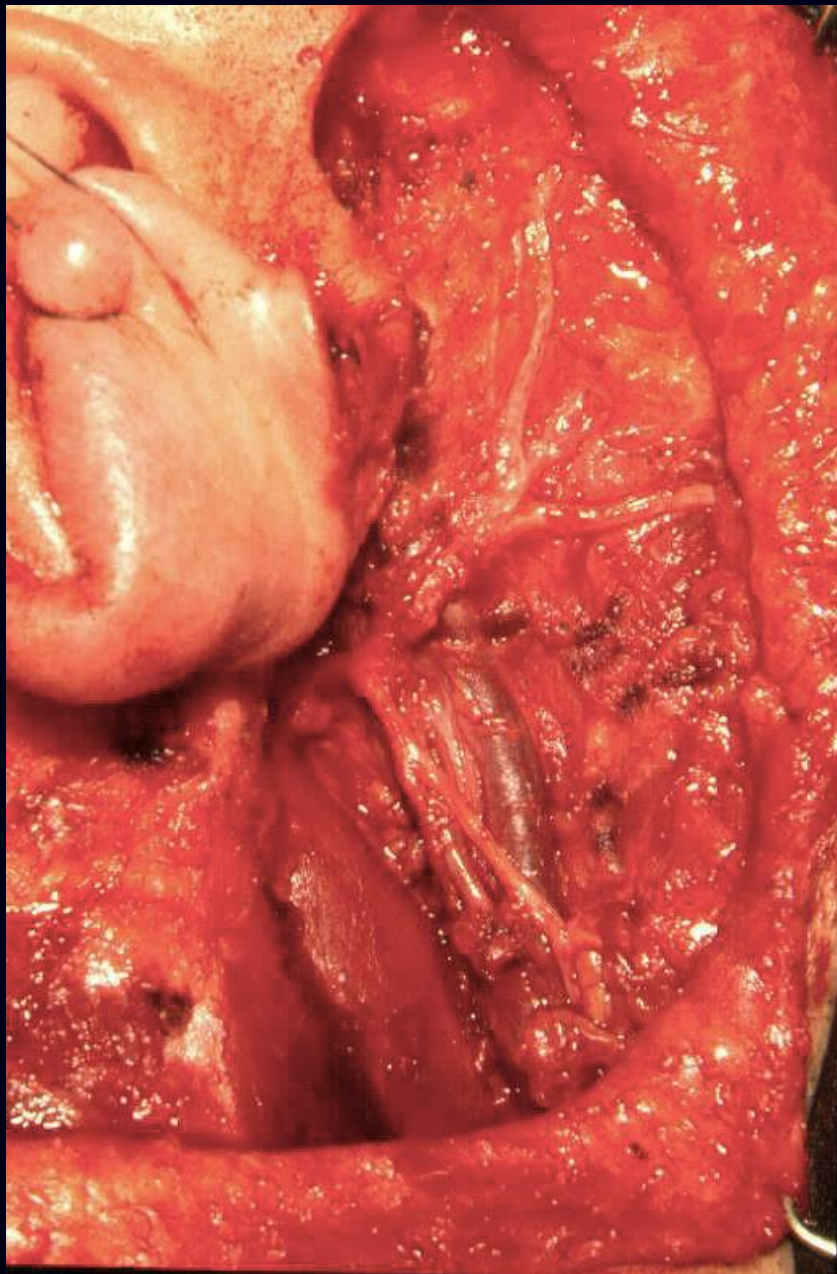
Bilateral oncocytoma



Pleomorphic adenoma on the palatinal gland



Orbital expansion of a palatinal cylindroma



After total parotidectomy



Adenocarcinoma of the parotid gland



Special chronic inflammations

Sjögren syndrome

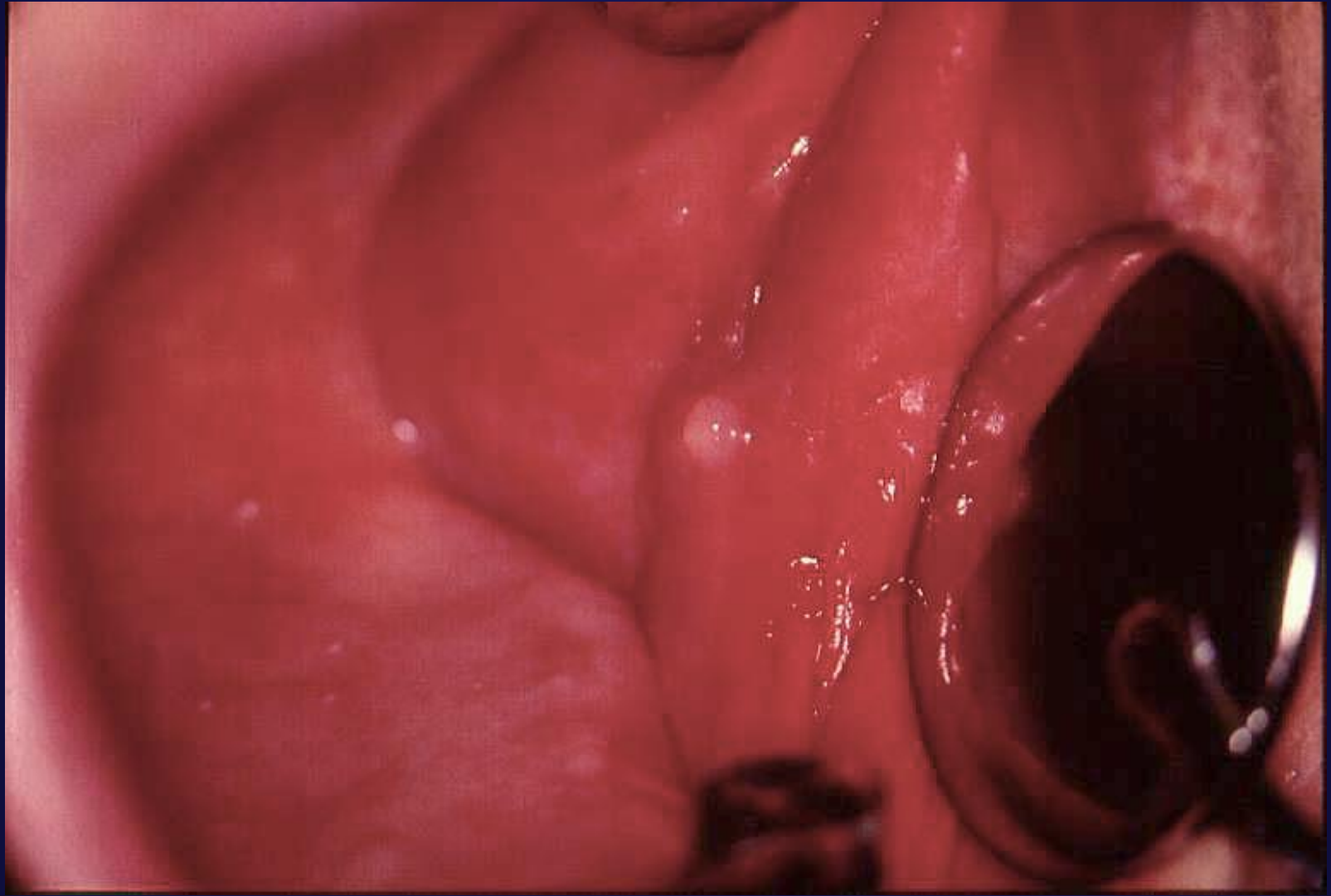
xerostomy

xerophthalmia

rheumatoid arthritis

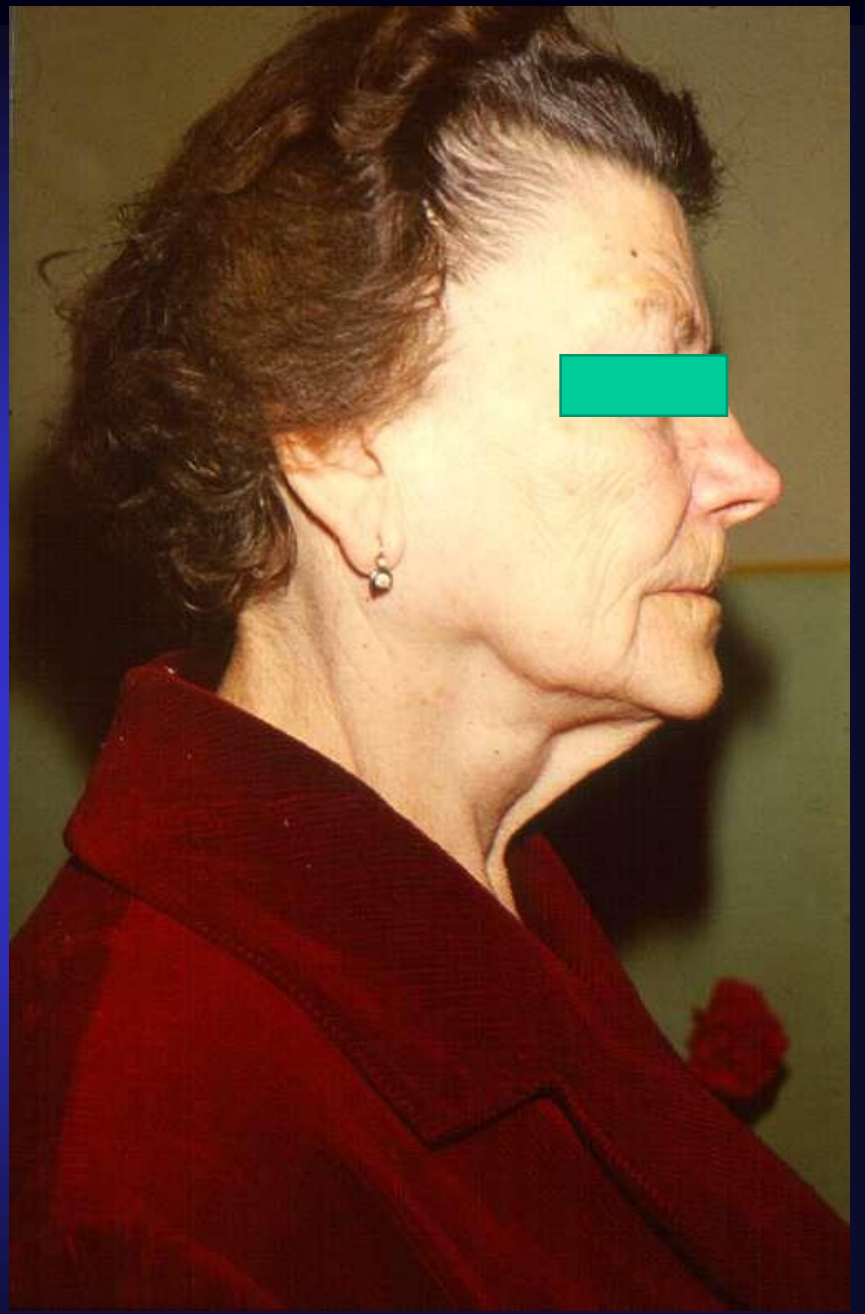
(Collagene disease)





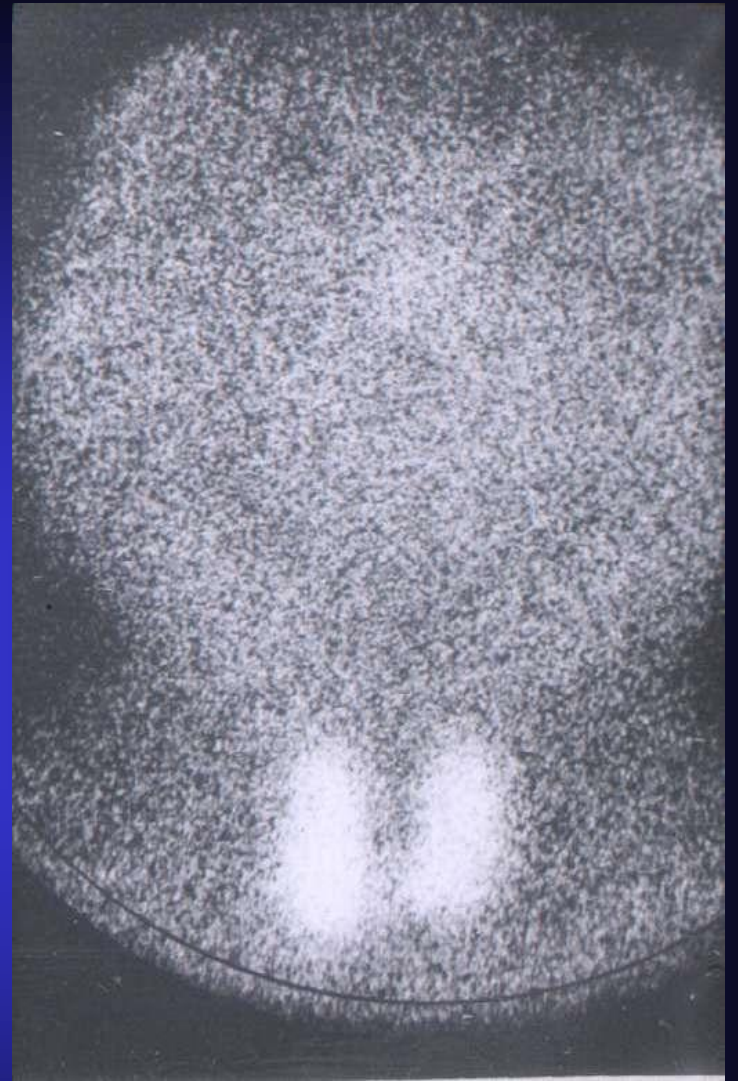








Sjögren syndrome with major lymphoid infiltration, without any salivary gland tissue



Sjögren syndrome with major lymphoid infiltration, without any salivary gland tissue



Special indication (consideration) for surgery

Heerfordt syndrome



Parotidomegaly
Facial paresis
Fever
Uveitis
(virus infection)

Changes in salivary secretion