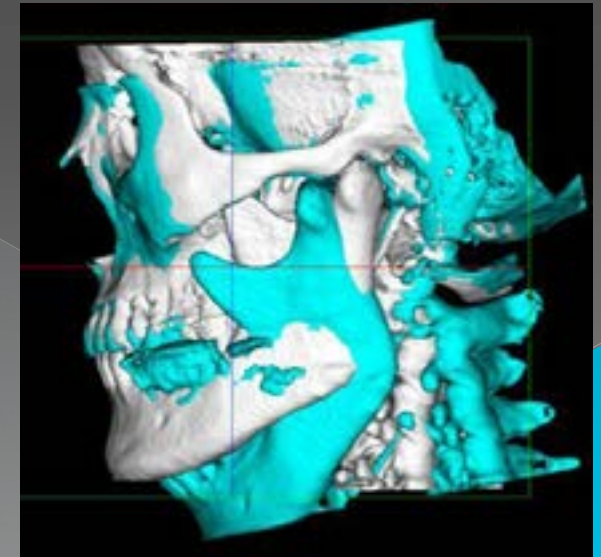


Oro-Facial Conditions in Cancer Patients

Parallel session
the International Society of Oral Oncology
Annual Meeting 2018

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Faculty Disclosure

<input checked="checked" type="checkbox"/>	No, nothing to disclose
<input type="checkbox"/>	Yes, please specify:

<i>Company Name</i>	<i>Honoraria/ Expenses</i>	<i>Consulting/ Advisory Board</i>	<i>Funded Research</i>	<i>Royalties/ Patent</i>	<i>Stock Options</i>	<i>Ownership/ Equity Position</i>	<i>Employee</i>	<i>Other (please specify)</i>



2018

28-30 JUNE
VIENNA, AUSTRIA

**SUPPORTIVE CARE
MAKES EXCELLENT
CANCER CARE POSSIBLE**



MASCC/ISOO

ANNUAL MEETING ON SUPPORTIVE CARE IN CANCER



www.mascc.org/meeting



Discussion

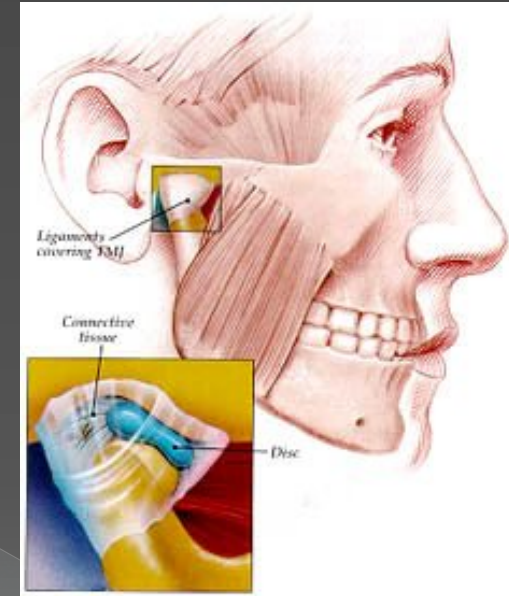
- Trismus
- Frey's Syndrome
- Oral bisphosphated related oral mucositis



Temporomandibular Disorder (TMD)

A collective term of a number of clinical problem

- TMJ
- Associated structures: masticatory, facial and cervical musculature
- Present as pain and loss of jaw function



Trismus in H & N Cancer patient

- A prolonged spasm of the jaw muscle leading to restricted mouth movement(Normal interincisal distance is 40-45mm, 35 mm is the functional cut off point
- Perceived restriction, and function impairment
- Tumour growth, Surgical defect, Post Radiation fibrosis of muscle of mastication

Trismus is a symptom of

- Primary/secondary tumour growth (NPC)
- Radiation-induced fibrosis
- Surgical reconstruction relapse

Trismus has negative impact to

- Speech
- Nutritional intake
- Oral hygiene
- Compounding the complications of xerostomia, and oral mucositis and associated PAIN further defer active jaw movement

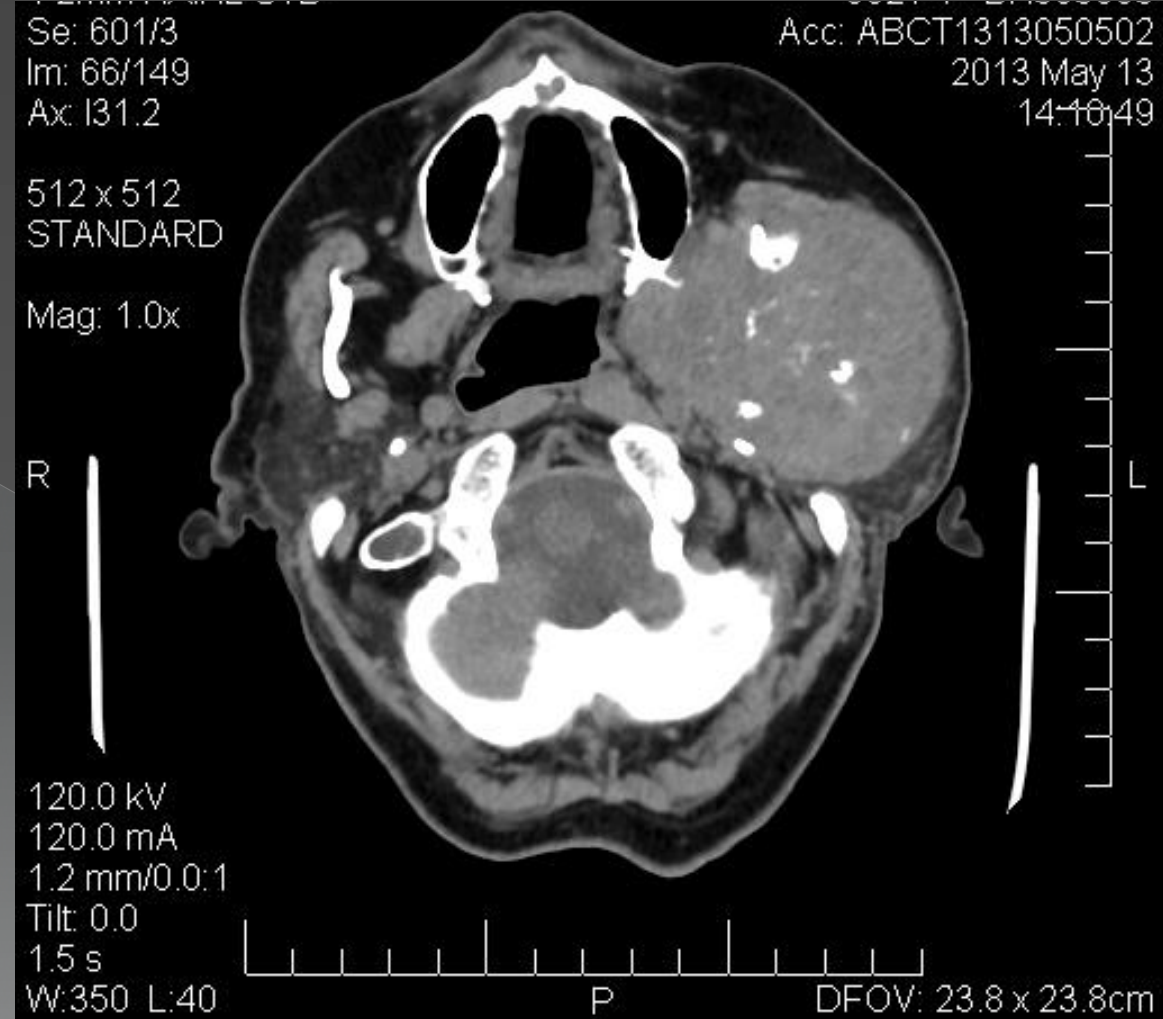
Trismus Primary Tumor Growth











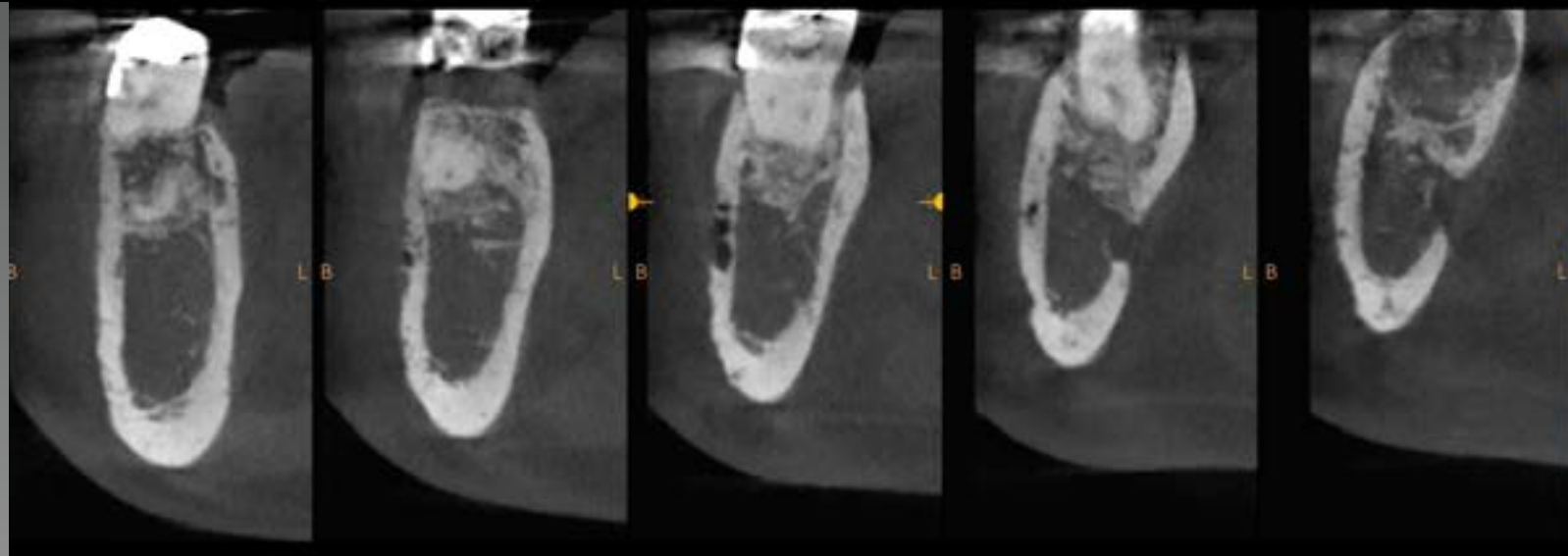
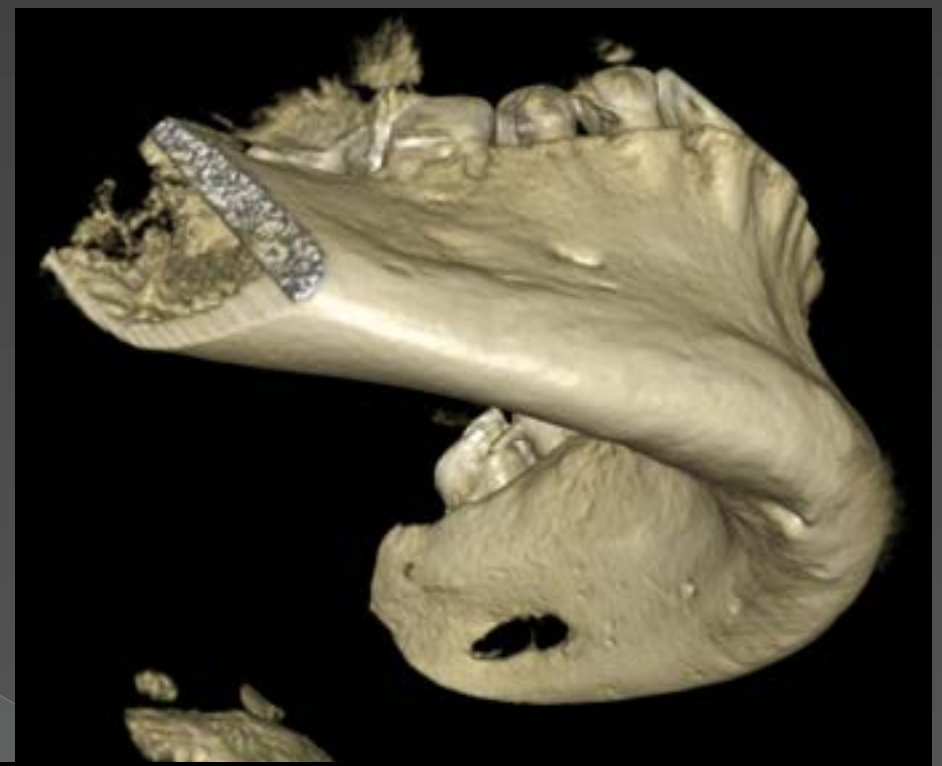
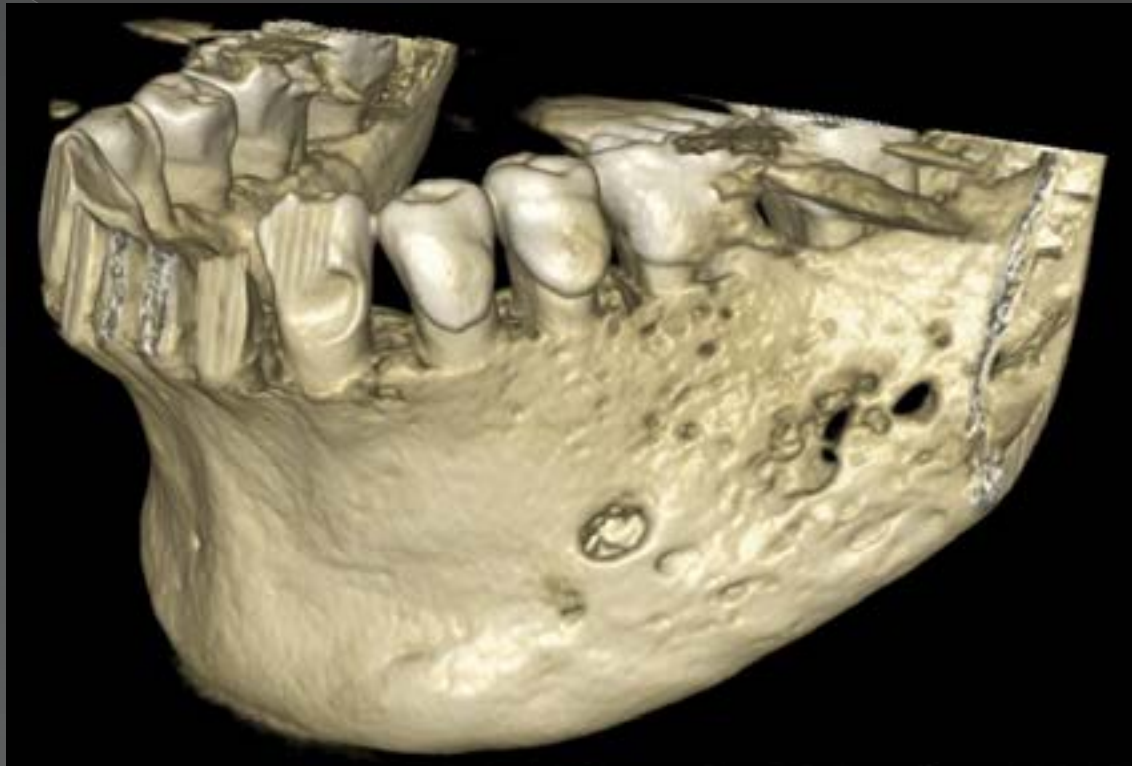


Left Buccal
Mucosa

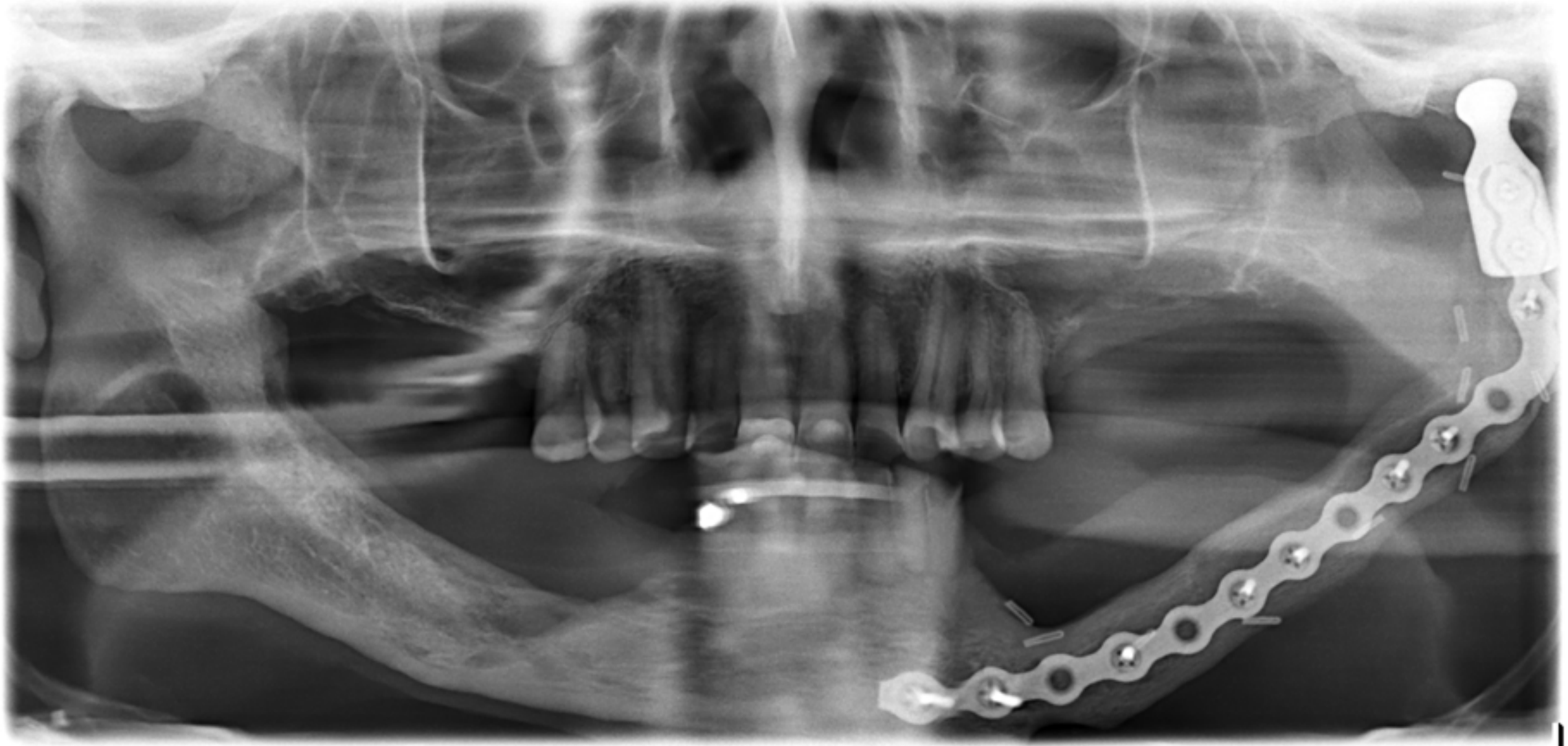




Inflammatory response of ORN will changes the insertion of mastication muscle; and adjacent soft tissue.







Post radiation trismus

Muscle fibrosis occurs progressively as mucositis

A late complication in radiotherapy H & N / Nasopharyngeal carcinoma (5-17%),
2-3 year after Rad completed

Average of 32% reduction of MID 4 year post radiation.

Post Radiation Trismus



June 2009



Oct 2010

Etiology-

- Not fully understand
- Radiation fibrosis
 - Atypical fibroblasts, and large amount of extracellular matrix are deposited
- Gradual decrease in vascularity
- Denervation atrophy of muscle
- Correlated with the radiation field and dose

Assessment of Trismus

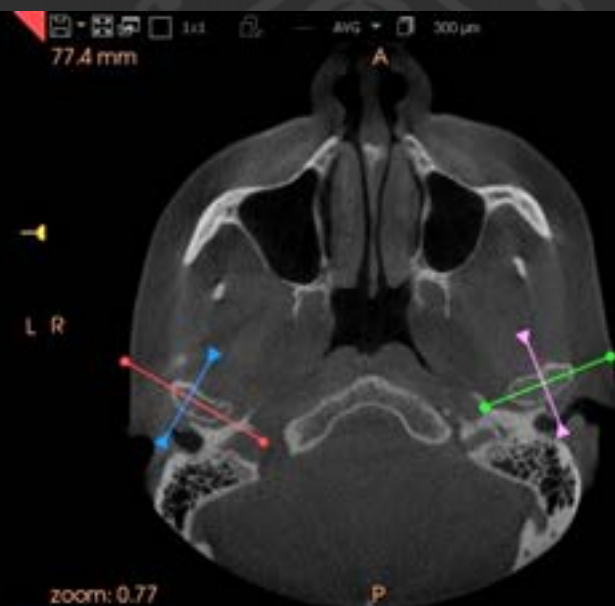
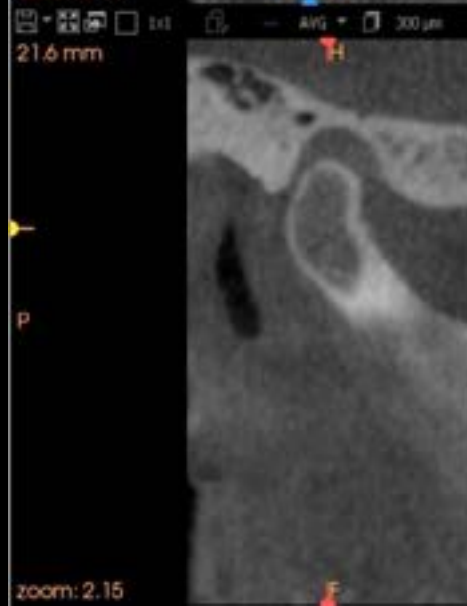
- Pain on mandibular movement
- Active ROM: ($>25\%$) was defined as trismus.
- Palpation of masticatory muscles

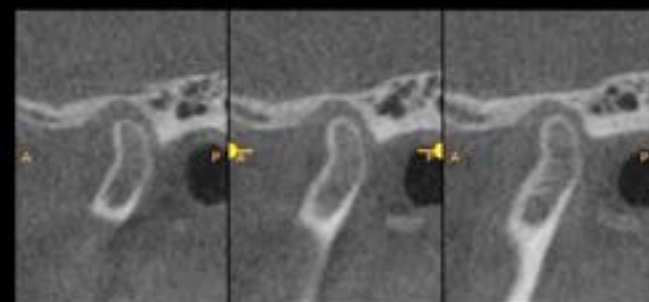
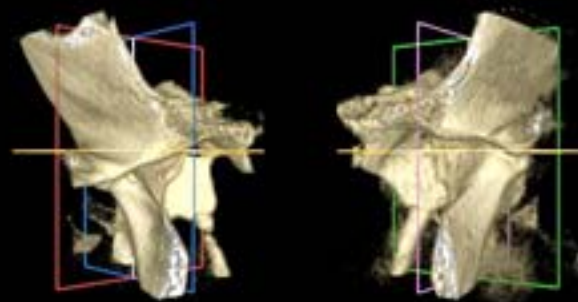
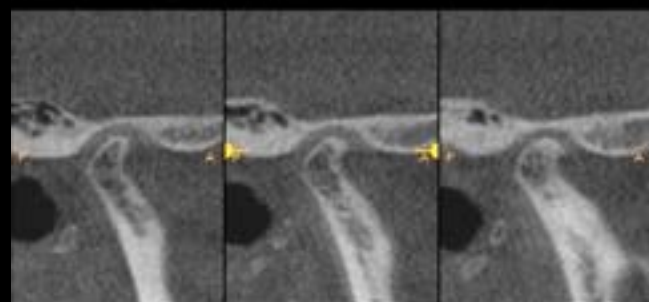
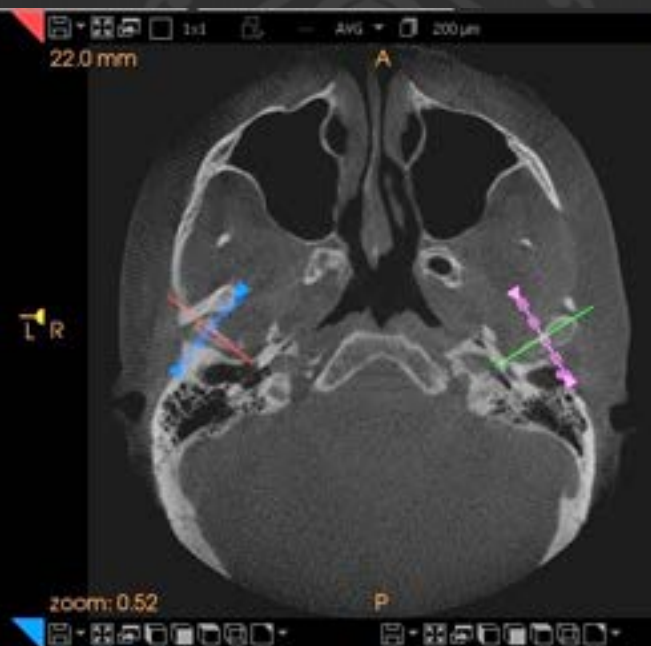


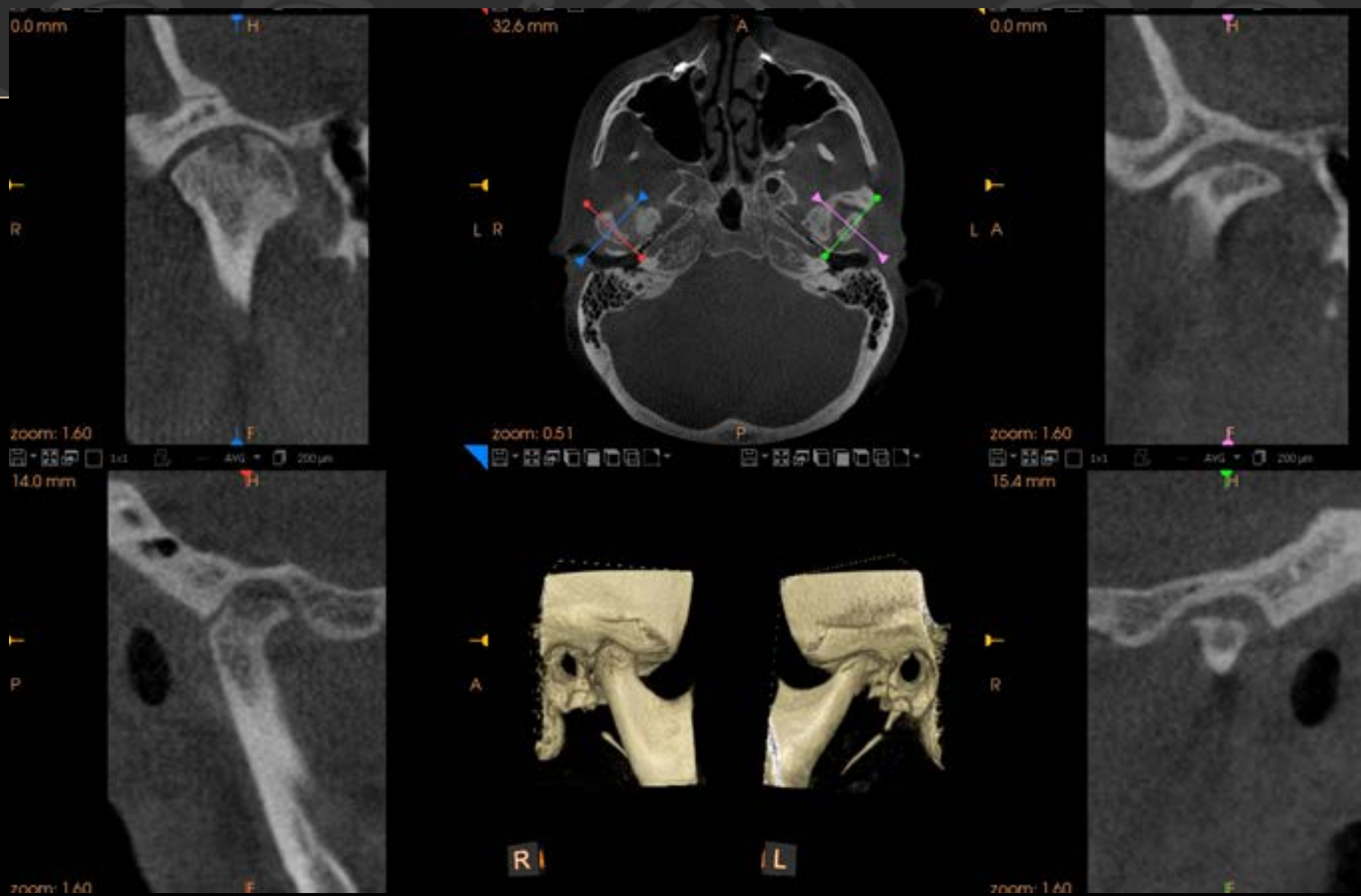
Trismus Imaging

- Panoramic radiography
inadequate visibility of articular eminence/ fossa.
Limited to the lateral slope and central parts of
the mandibular condyles
could see erosions, sclerosis and osteophytes of
condyle
- Computed tomography (osseous
component), MRI, US









Management of Radiation induced trismus

Chronic progressing disease

- The absence of specific treatment, and irreversibility of the condition.
- Daily jaw exercise to maintain ROM

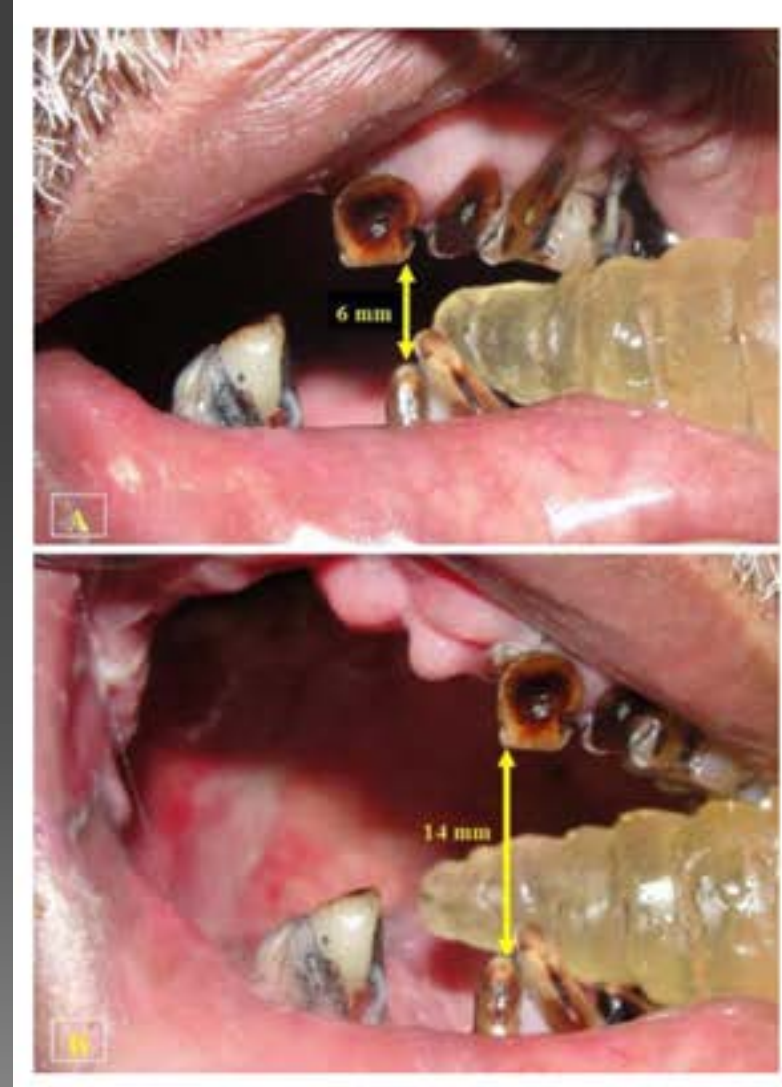
Management

- Dynamic bite opener
- Therabite System,
- Stacked tongue depressor (could not do without teeth
- Coronoidectomy, forced mouth opening under GA
- Oxygen,
- microcurrent

Conservative management

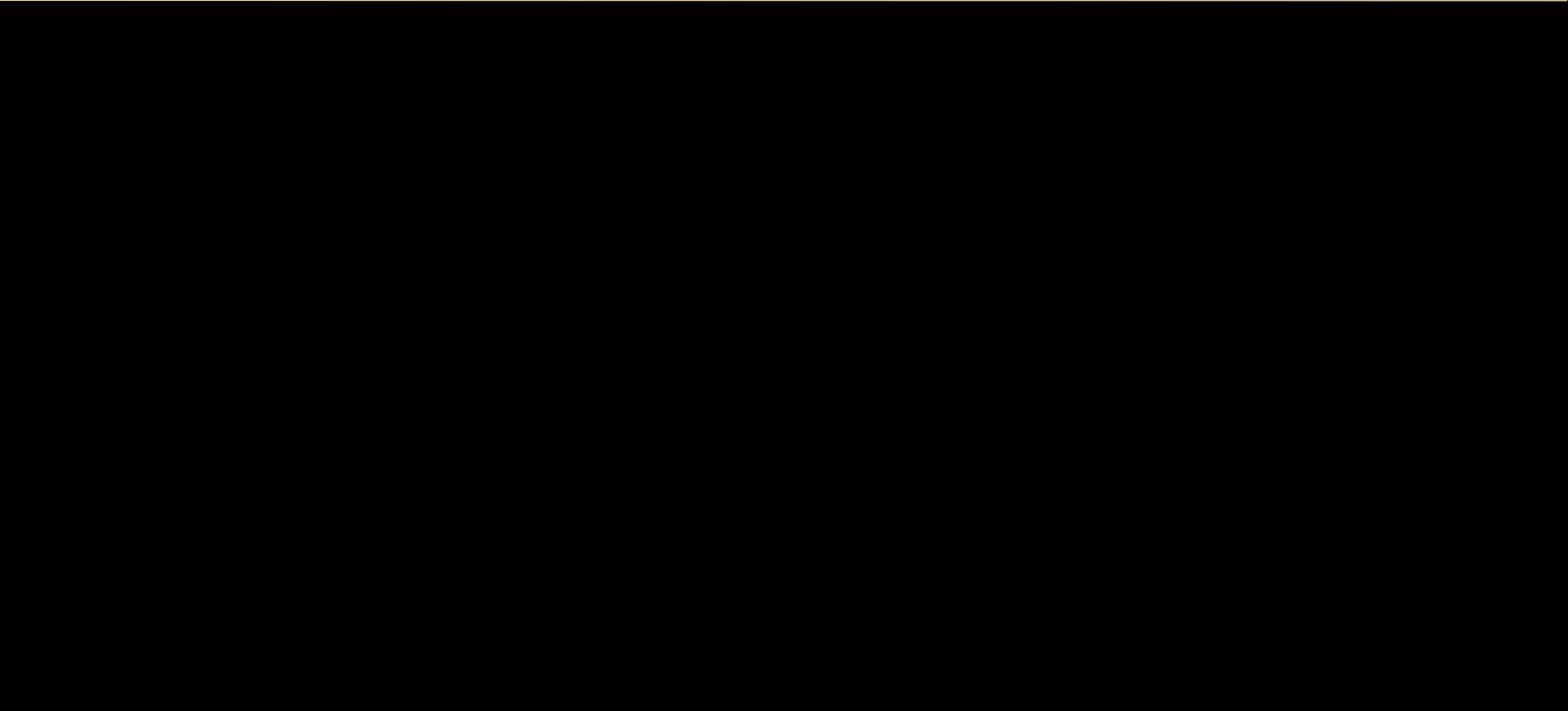


BMJ Case Reports 2012; doi:10.1136/
bcr-2012-007326









ORAL EROSION MUCOSITIS ASSOCIATED WITH IMPROPER ADMINISTRATION OF A DRUG

83 YOF with anterior FOM SCC T2 N0

Resection and a radial forearm flap, and radiotherapy completed in 1998
Postoperative reconstruction of mandible with implant supported
prosthesis after HBO in 2000

In 2012, patient presented with 9 Month hx persisted “canker sore” on
right lower vestibule. 9812796-

j can dent assoc 2010;76:a156

DYSGEUSIA/DYSPHAGIA



A decorative floral pattern in a dark grey color, featuring symmetrical, swirling leaf and flower motifs, is positioned at the top of the page.

Swallow the tablet with a full glass of water.

Avoid lying down for at least 30 minutes after taking the dose *and* until after the first food of the day has been consumed.

Do not chew or suck on the tablet.







CASE STUDY- CHIEF COMPLAINT

A pleasant lady presents with persisted flushing and sweating at the left pre-auricular region during meal time.



CASE STUDY- HPI AND SOCIAL HX

Early 2000 Pt was experiencing persistence pain and increase swelling in the L parotid area

Oct. 2000 Pt was seen by an ENT specialist

Fine Needle aspirate was obtained from the L preauricular region

Consistent with reactive lymph nodes

Unresolved swelling



March 2001 Superficial parotidectomy

Pathology confirms no neoplasm

Uneventful Recovery

No disfiguring, No neurosensory deficiency

2003

Pt notice a warm sensation, moisture and redness on the L side of the operation site after the first bite of vinaigrette.

Since then symptom progress

Every single meal Pt would have similar transient symptoms.

Because of this, Pt continuously had to pat the L parotid area with a napkin.

Pt was very cautious at social event and as Pt's co-workers would say "Are you leaking again"

A decorative border at the top of the slide featuring a repeating pattern of stylized leaves and flowers in a dark gray color.

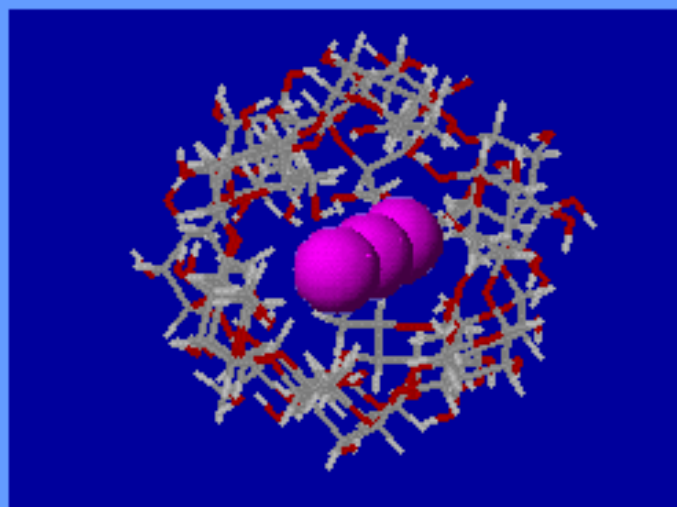
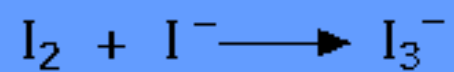
Pt realized this was a condition Pt would have to suffer through
out life

CASE STUDY-MINOR STARCH-IODINE TEST





Starch - Iodine Complex



Iodine slides into starch coil
to give a blue-black color

DIAGNOSIS-GUSTATORY SWEATING AKA FREY SYNDROME

Clinical sweating and redness of the involved skin upon gustatory stimulation.

First described by Dr. Ballilarger in 1853 after drainage of parotid abscess

Observation of similar gustatory sweating after traumatic injuries of the parotid region (e.g. Condyle fractures, blunt trauma, bullet wounds)

DIAGNOSIS-GUSTATORY SWEATING AKA FREY SYNDROME

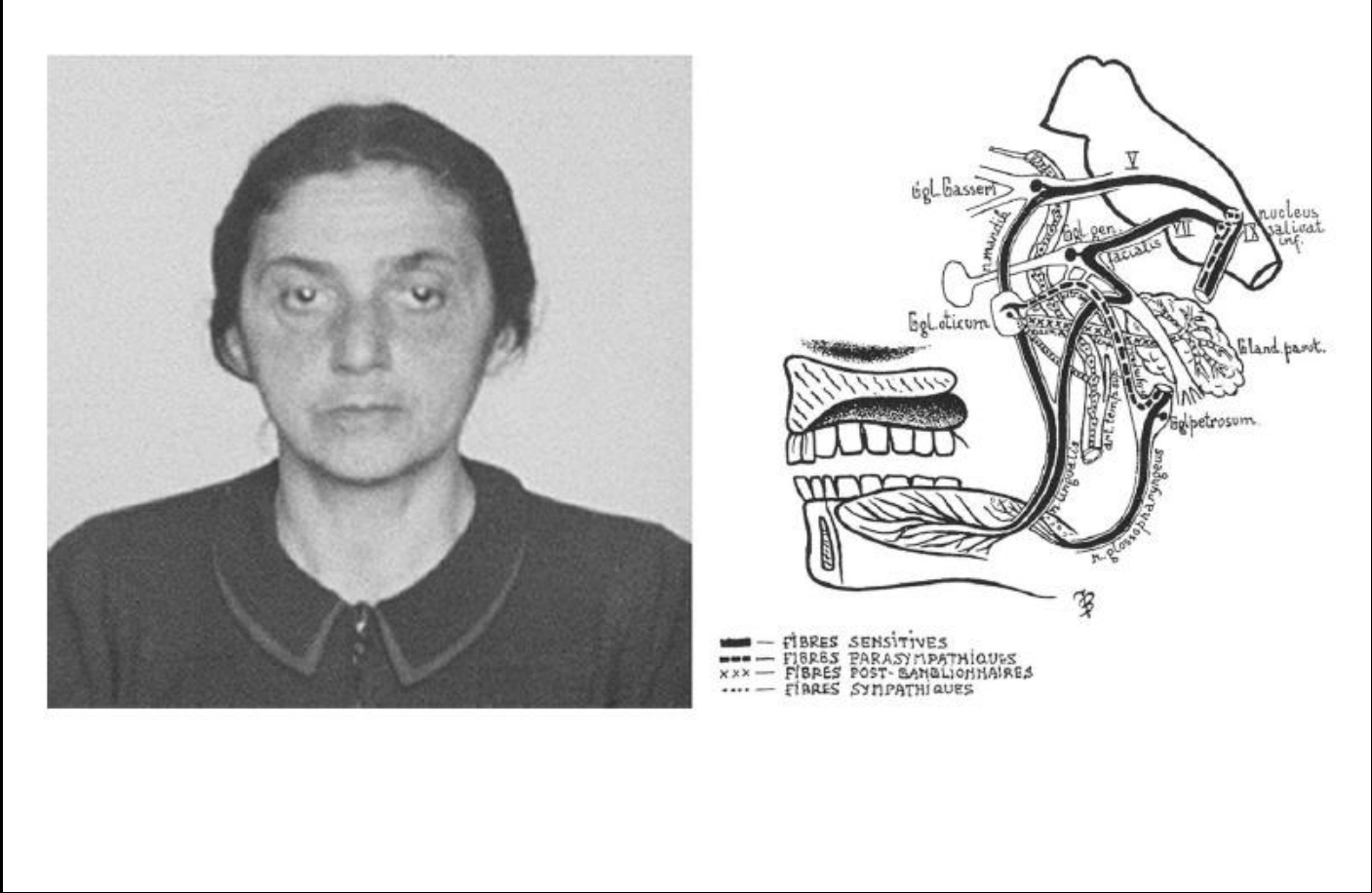
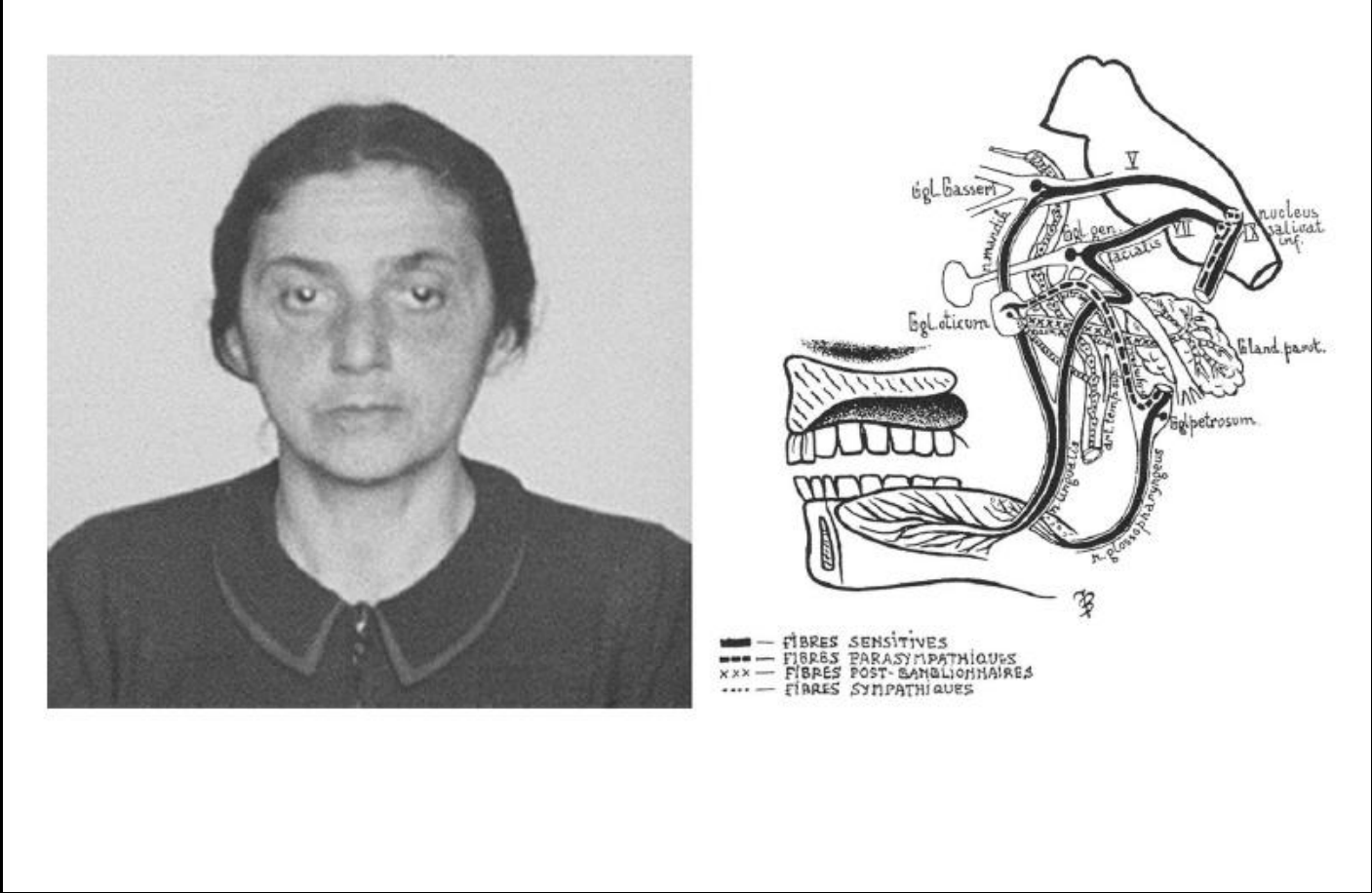


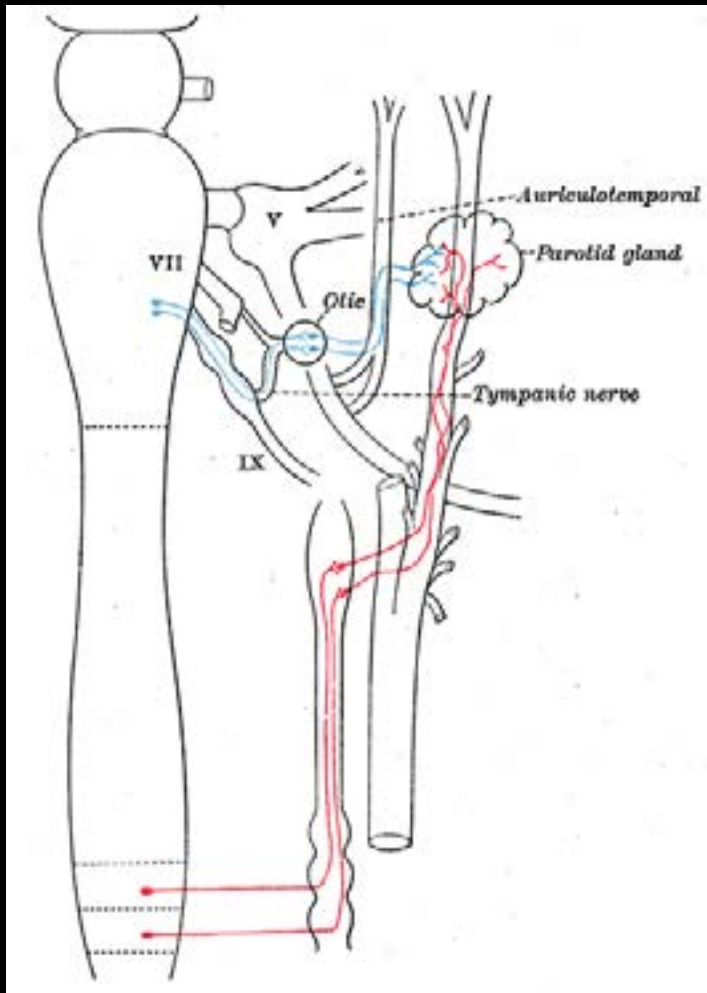
Diagram illustrating the distribution of cranial nerve fibers (V, VII, IX) and their associated structures (Ganglia, Nucleus, Gland, etc.).

Legend:

- FIBRES SENSITIVES
- - - FIBRES PARASYMPATHIQUES
- xxx FIBRES POST-GANGLIONIQUES
- ... FIBRES SYMPATHIQUES

Dr. Lucja Frey, neurologist (1889-1942)

PATHO-PHYSIOLOGY



Bottom line:

Injury of auriculotemporal nerve results in misdirected regeneration of parasympathetic fibers of salivary gland onto sympathetic receptors innervating sweat gland.

INCIDENCE –AFTER PAROTIDECTOMY

95% of patient show clinical sign

30-40% of patient noticed the symptoms.

10% of patient will have subjective complaints

Onset from 2 weeks to 2 years post surgery.

TREATMENT OPTION

Surgical: prophylactic or therapeutics

Prophylactic: Thick skin flap

Therapeutics: Skin Grafting,
Tympanic neurectomy

Medical

Topical aluminum chloride 20%,
Drysol, BID- anti-perspirants

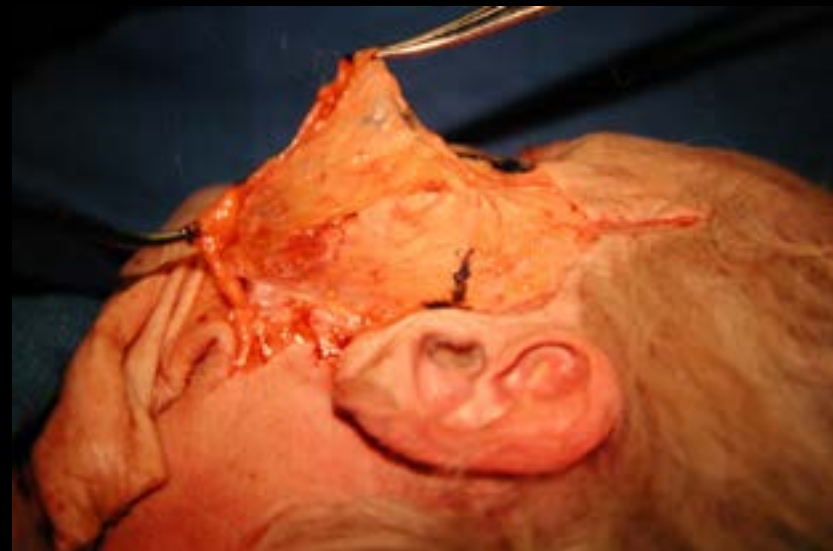
Topical anticholinergic drug
(scopolamine 3%)

Botulinum toxin A injection

THICK SKIN FLAP

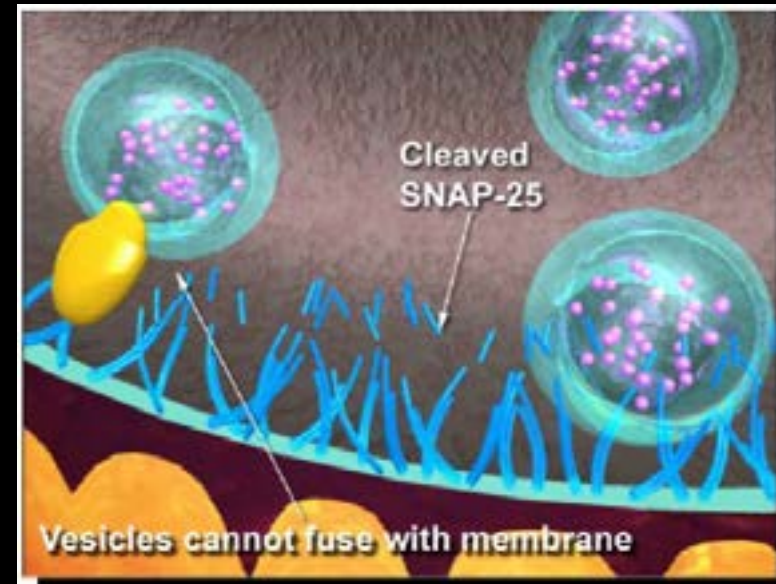
Advance the SMAS to cover
the resected parotid gland

Superficial
musculoaponeurotic system: a
fascial layer overlying the
parotid, platysma, and
preauricular cheek area



BOTULINUM TOXIN TYPE A

Neurotoxin enters the cytoplasm of peripheral nerves cells by receptor-mediated endocytosis. It then breaks down the synaptosome-associated protein SNAP-25, which is for exocytosis of acetylcholine vesicles.



POSSIBLE S.E OF BOTULINUM TOXIN

Temporary partial weakness of the upper lip, and
drooping the eyelid, diplopia

TWO WEEKS LATER



Within 4 – 5 days of treatment, there was no more sweating.

There is still some redness and warm sensation with certain foods.

Thank You