ORAL TUMOURS

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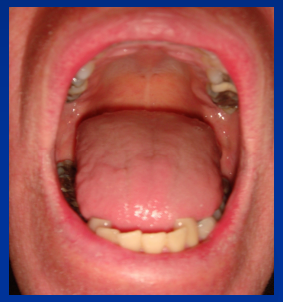
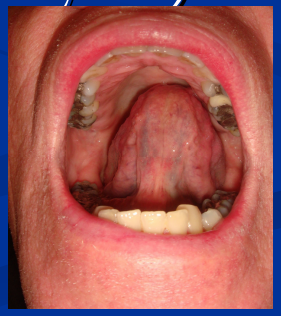
ORAL TUMOURS

Definition of ORAL CAVITY



- Lips
- Buccal mucosa
- Retromolar trigone
- Maxillary and mandibular alveoli
- Hard palate (NB soft palate is oro-pharynx)
- Tongue
- Floor of mouth



ORAL TUMOURS

- TYPES Benign

  Malignant of oral cavity= 30% of HNCa

- TUMOUR ORIGIN

Surface epithelium

Minor salivary glands

Submucous soft tissues

Dental

Primary bone tumours

Metastatic to OC (1% of all tumours→ 2º to oral cavity esp lung, kidney, stomach, liver, breast, adrenal; 1% of all oral cavity

Ca = 2º

ORAL TUMOURS

BENIGN

- Non neoplastic

1. Mucocoele = mucous extravasation→ mucus pool, granulations, histiocytes, macrophages
2. Mucous retention cysts= columnar lining
3. Ranula = mucous retention cyst of FOM arising from sublingual glands→ soft, fluctuant, blue
4. Lympho-epithelial cysts (origin =inclusion SSE)
5. Necrotising sialometaplasia (spontaneous swelling, ulcer can confuse with Ca.. Excise minimal margin)
6. Median rhomboid glossitis = smooth surface, oval to rhomboid, posterior midline tongue dorsum, from candida shows epthelial hyperplasia and chronic inflammation

ORAL TUMOURS

DENTAL

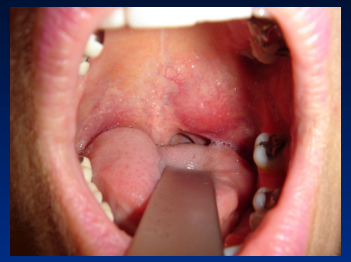
- Odontogenic cysts

1. Developmental = gingival, odontogenic keratocyst, dentigerous, eruption cyst,
2. Inflammatory = radicular, paradental

- Odontogenic tumours

1. Epithelial esp ameloblastoma
2. Mesodermal e.g. myxoma, fibroma, cementoma

ORAL TUMOURS



- ORAL SALIVARY TISSUE

Benign :- pleomorphic adenoma; monomorphic adenoma; oncocytoma;

Warthin's tumour possible in OC..rare

Malignant:- adenoid cystic (esp palate); adenocarcinoma; mucoepidermoid; acinic cell – low grade; Ca ex-pleomorphic (esp palate, high grade); clear cell

ORAL TUMOURS

- SUBMUCOUS SOFT TISSUES

Benign and malignant tumours.

Origin from fat, fibrous tissue, smooth or skeletal muscle, blood vessels, lymphatics, peripheral nerves.

Treatment as for these tumours in other sites

ORAL TUMOURS

- BONE TUMOURS

<u>Benign</u>

The majority are benign tumours of dental origin

Ameloblastoma= 1% of tumours and cysts of mandible. Best Rx = complete surgical resection. (50 to 90% recur with curettage

<u>Malignant</u>

Osteosarcoma = most common malignant bone tumour in H&N, 5YS is 40%, mostly mandible (7% of all osteosarcomas.) Predisposition= Paget's, fibrous dysplasia, prior XRT

Chondrosarcoma less common, lower grade, mostly maxilla

Chordoma slower growth, late presentation, low cure rate

Fibrosarcoma = radioresistant. Rx = Sx, 5YS 25 to 30%

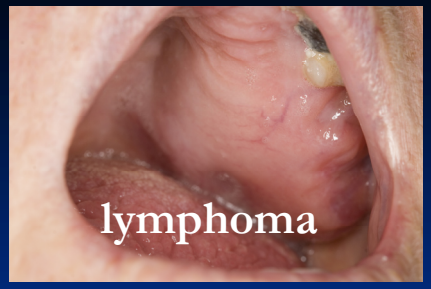
ORAL TUMOURS

PREMALIGNANT – BENIGN NEOPLASTIC

- Leukoplakia, dysplasia, erythroplakia, erythroplasia (parallel to solar damage)

  observation, excision/laser ablation with 5 – 10 mms margin
- Simple papillomas, fibromas, hyperplastic

  excision small margin



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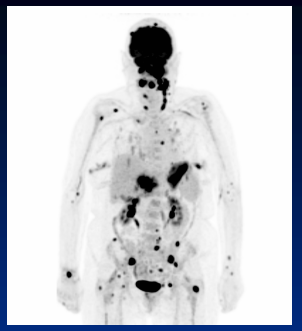
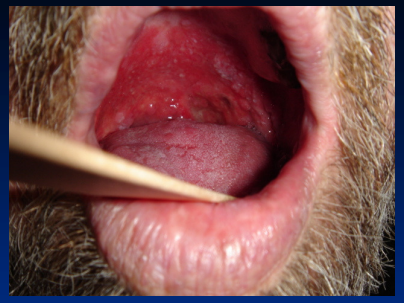
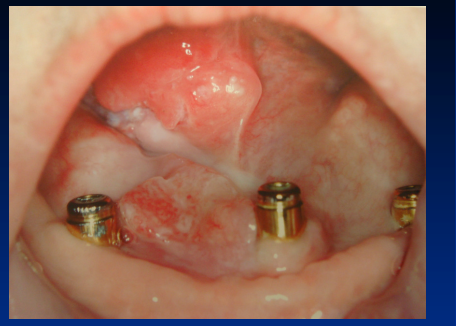


- Epithelial origin = 90% of oral malignancy
- 90% are SCC (others BCC, MM, glandular origin, sarcomas, lymphomas, extramedullary plasmacytoma, multiple myeloma, leukemias, metastatic)
- Tongue and floor of mouth mostly involved
- 90% of initial LN involved in Levels I, II & III
- Cure rates reduced by 50% when LN involved
- Up to 30% of patients develop multiple primary cancers, 20% in 5 yrs, annual incidence 3 – 7%
- Synchronous primary tumours (other sites) in 5 - 30%

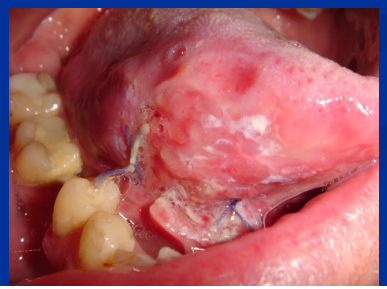


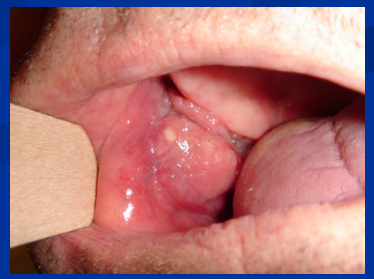
ORAL TUMOURS SCC



ETIOLOGY SCC (initiator-promoter sequence)

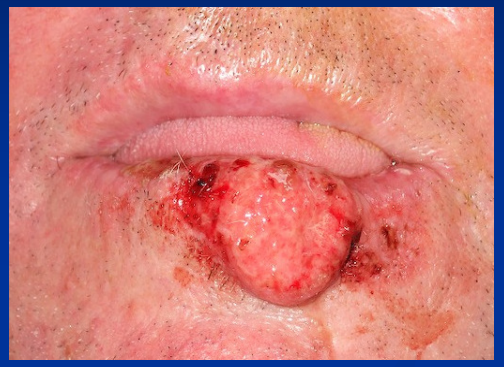
- SMOKING – carcinogen. Polycyclic hydrocarbons, Nitrosamines→ DNA mutation affecting P_{53} suppressor gene, growth factors EGFR , TGFα
- ALCOHOL – irritant (promoter/ co-carcinogen)
- Heavy smoking and drinking increases risk OCCa x 15
- Low socio-economic group, M > F, age, vitamin deficiency
- Chronic dental trauma, poor oral hygiene, mouth washes
- Premalignant lesions leukoplakia, erythroplasia, submucous fibrosis, ? lichen planus
- Betel nut chewing (slaked lime), reverse smoking
- HPV (P_{16}); HIV; ? Syphilis

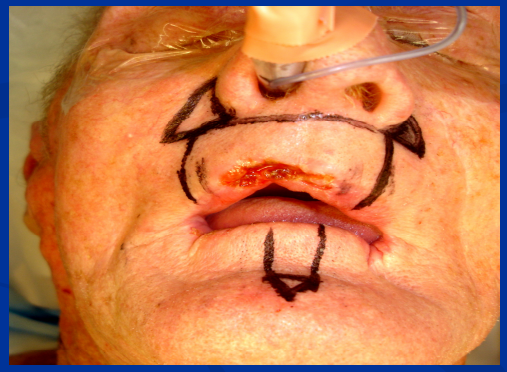




ORAL TUMOURS

- SITES SCC ORAL CAVITY





LIP

Lower lip 94%; upper lip 5%; commissure 1%

LN^+ in Qld 10%; mortality 1% (T. Harris)

INTRAORAL

In the USA lip = tongue = FOM ~ 30%

Alveolar ridge = 10%

Buccal mucosa and retromolar = 5%

Hard palate < 1%

Metastatic rate at presentation = 30% for all stages combined.

ORAL TUMOURS

- STAGING

TNM UICC 7TH Edition 2010

75% T_1 & T_2 usually suitable for surgery

- MANAGEMENT

Surgery alone for early stage disease

Surgery and post-op XRT for T_2 , T_3 , some T_4 … in fit/operable patients

CTX-XRT for T_4 ? Incomplete response, recurrence →Surgery for salvage/palliation. Post-op big/aggressive tumours ECS

XRT for unfit T_1, T_2 , T_3 plus palliation (sometimes CTX alone)

XRT for involved/close margins, ECS, LVS, PNS

Some advanced tumours suitable only for palliative care

(new big primary in survivor of prior radical Sx + XRT)

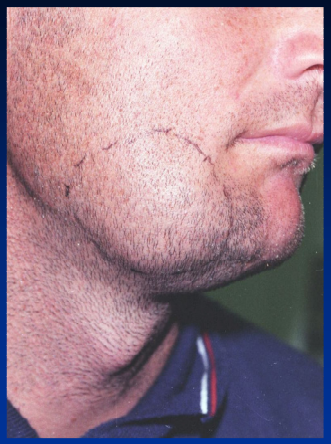
Radiation 'induced' tumours…poor prognosis, hard to treat, reserve XRT in Rx planning in field change patients for bigger tumours

ORAL TUMOURS

PROBABILITY REGIONAL METASTASIS

- Infrequent for lip, alveolar ridge and hard palate (10 to 20%)
- Oral commissure 20%
- FOM 15 to 38% (bilaterality)
- Tongue up to 65%; ventral more aggressive?
- Buccal mucosa and RM trigone aggressive, nodal Rx usually needed

ORAL TUMOURS



LYMPH NODES

- Elective dissection cervical nodes:- primary thickness > 4mms, (O'Brien, Australia 2004) provides improved outcome, prognostic information and if +ve histologically indicates adjuvant XRT or completion neck dissection.

- Clinically involved nodes require treatment. If operable, comprehensive or modified radical neck dissection in fit patients. If unfit/inoperable, radiotherapy +/- CTX

ORAL TUMOURS

- SURGERY
- LIP: Margin 10 mms (buccal surface origin esp.)

  5 - 10 well localised, exophytic, WDSCC

  Larger tumours more aggressive, = margin

  Lower lip, 30% direct closure (25% upper lip)

  Abbe flap best repair, only recon to give all layers

  Total lower lip = double Abbe flap

  Karapandzig if frail + LA- IV sed (no mucosal bleeding)

If free flap used, use for lining; cover head and neck skin flap

Lymph nodes:- Rx only if involved. Biopsy/FS if unsure

ORAL TUMOURS

- TRACHEOSTOMY

Indications

Rarely needed for lip. **<u>Always</u> consider for oral cavity**.

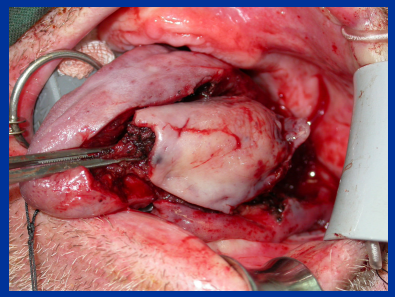
Can be avoided if surgeon experienced, fit healthy patient warned re possibility of emergency trache prn post –op.

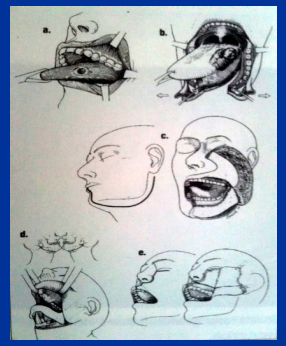
*Should go to HDU for one on one care initially; NP airway for posterior suction. Danger period 1st 36 hrs

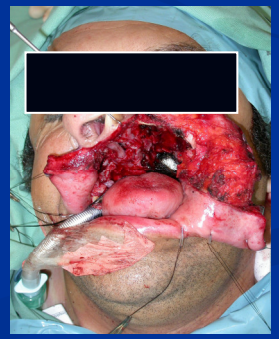
Co-morbidities esp cardiac, COAD; elderly; alcoholic; prior head and neck tumour involving neck XRT (laryngeal oedema); history bleeding

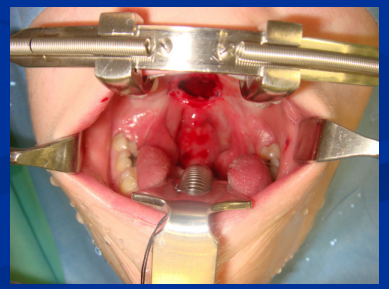
SURGICAL APPROACH TO ORAL CAVITY

1. Peroral suitable most lesions if operator experienced esp. edentulous patients; plus neck access
2. Weber-Ferguson upper cheek flap for maxillectomy
3. Lower cheek flap for large floor of mouth /retromolar; visor flap (makes insensate)
4. Mandibulotomy/Paralingual extension for mandible









MANDIBULAR RESECTION

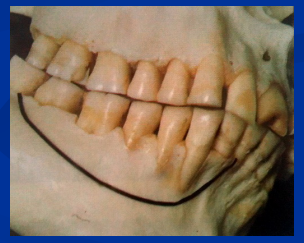
- Tumour abuts bone:- dentate = rim resection

  edentulous = ? Rim resection (height)

Or split inner table/outer table.

- Tumour involves bone:- dentate and alveolus= rim resection

  edentulous = segmental



Body of mandible, cancellous segmental/partial mandibulectomy/total mandibulectomy

- Prior XRT devascularises bone…rim dangerous

ORAL TUMOURS

- NONSQUAMOUS CARCINOMAS

1. Lymphoma: Sx restricted to diagnostic material
2. Mucosal Melanoma: Sx and XRT for primary. Neck dissection for +ve nodes
3. Adenoid cystic Ca & high grade MEC:- Radical Sx for primary, F/S control nerve spread PO XRT
4. Kaposi sarcoma, XRT and intra-lesional CTX

ORAL TUMOURS

THE END