



NHS Sheffield & Barnsley

Oral Lesions

Presentations, Pathology
& the Practitioner.

BEST Meeting

16th November 2016

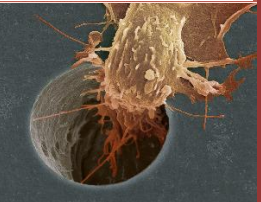


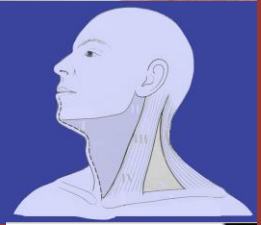
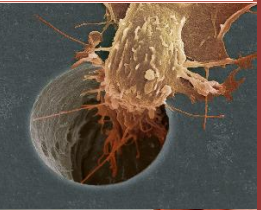
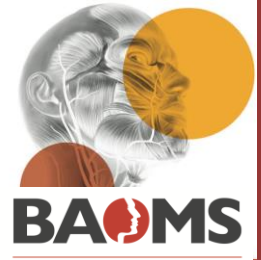


Sheffield

Austen SMITH

Consultant Oral & Maxillofacial Surgeon
Sheffield and Barnsley

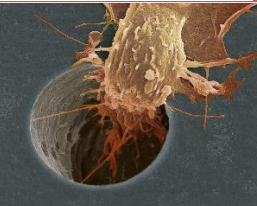


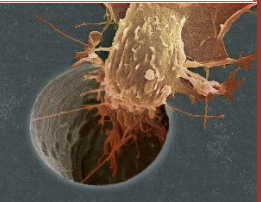




Oral Lesions

- Diagnostic Importance of Oral Cavity Lesions
- Normal Anatomy / Examination
- Variations / Everyday findings
- Specific Lesions and their significance
- ? Picture based referral Quiz





Importance of the Oral Cavity





Oral Cancer

“Oral cancer” sites

- Lip
- Tongue
- Mouth
- Oropharynx
- Pyriform sinus
- Hypopharynx
- Other sites

Statistics

- 405,000 new cases worldwide
- 66,650 EU cases
- 5,325 UK diagnoses in 2006
- 3,450 males, 1,785 females
- 1,822 UK deaths in 2008
- Rate per 100,000 population = approx 9 cases
- M:F ratio roughly 2:1 (5:1 50yrs ago)

Cancer Research UK
2010



Oral Cancer

- In the UK around 4,750 new cases of “mouth cancer” are diagnosed annually.(U.S. 34,000)
- The number of new mouth cancer cases increased by more than 30% percent in a period of 10yrs.

DAHNO 2012

8272 cases were presented for analysis, with a date of Diagnosis - 1 November 2011 and 31 October 2012.

These comprised

2529 oral cavity cancers,

2303 oropharyngeal cancers,

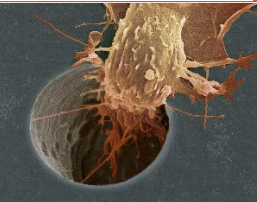
1900 laryngeal cancers,

456 hypopharyngeal cancers,

444 major salivary gland cancers

364 nasal cavity and sinus,

172 nasopharyngeal cancers





Caseload – Oral Cancer

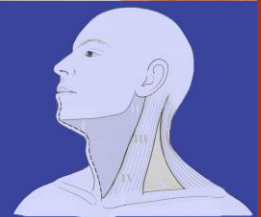
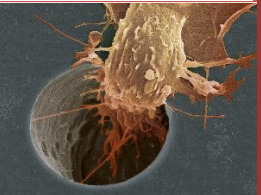


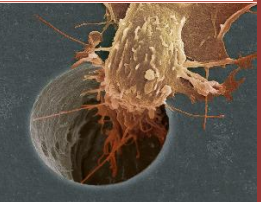
Table 1.1: Number of new cases and rates of oral cancer, UK, 2007

	England	Wales
Cases		
Males	2,818	209
Females	1,443	119
Persons	4,261	328
Crude rate per 100,000 population		
Males	11.2	14.4
Females	5.6	7.8
Persons	8.3	11.0
Age-standardised rate (European)		
Males	10.3	12.0
95% CI	9.9 10.7	10.4 11.6
Females	4.3	5.6
95% CI	4.0 4.6	4.6 5.6
Persons	7.2	8.7
95% CI	7.0 7.4	7.8 9.6

For population of 670,000
 This roughly equates to
48 - 55 cases of Oral Cancer per year
 in Sheffield,

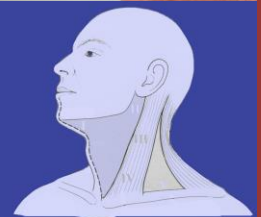
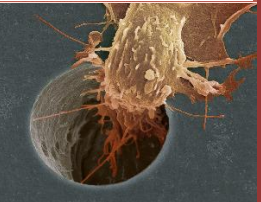
≈16-25 cases per year for
 Barnsley





Normal Anatomy

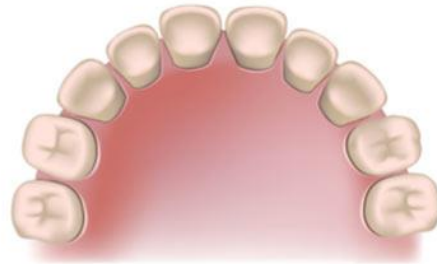




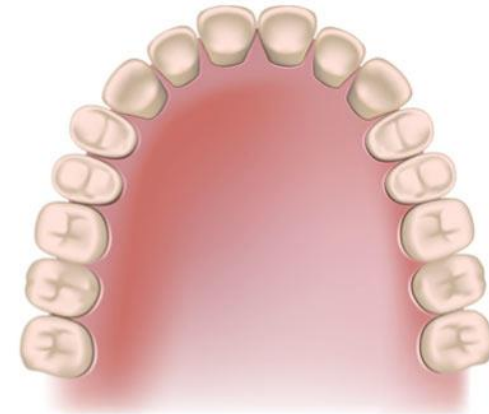
Teeth

Deciduous Dentition (Baby-Primary Teeth)

Permanent Dentition



Upper Teeth



Lower Teeth

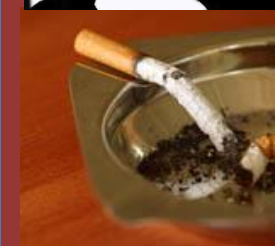
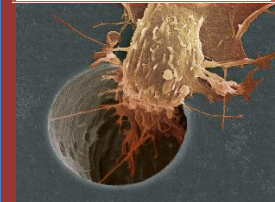


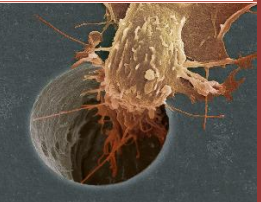
- 20 Children – 2 incisors, 1 canine, 2 molars in each quadrant
- 32 Adult – 2 incisors, 1 canine, 2 premolars, 3 molars in each quadrant
- Upper canines, second premolars, 3rd Molars commonly go “missing”
- Caries , periodontal disease recognisable



Soft tissues

- Cheek , floor of mouth, vestibule thinly keratinised
- Attached Gingivae , Palatal mucosa thick and resistant.
- Increased Keratin – WHITE
- Reduced Keratin – RED
- Injury provokes
Frictional keratosis ,
Frictional ulceration
or granulation - Papilloma



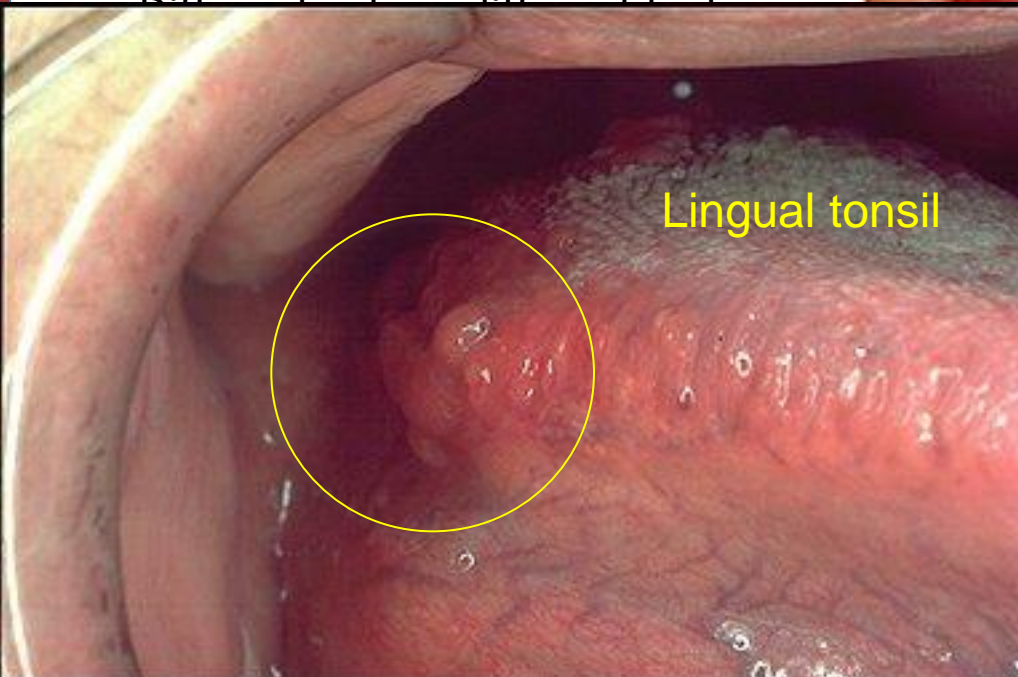
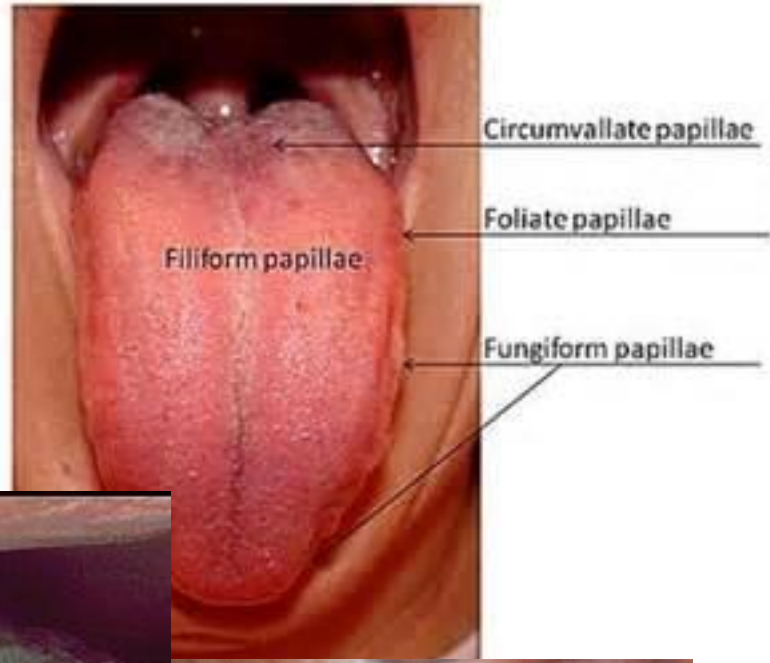


Variations / Everyday Findings



Lingual Tonsil / Circumvallate Papillae

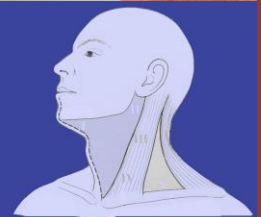
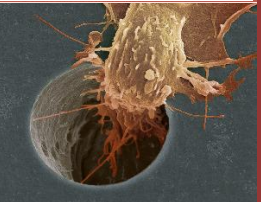
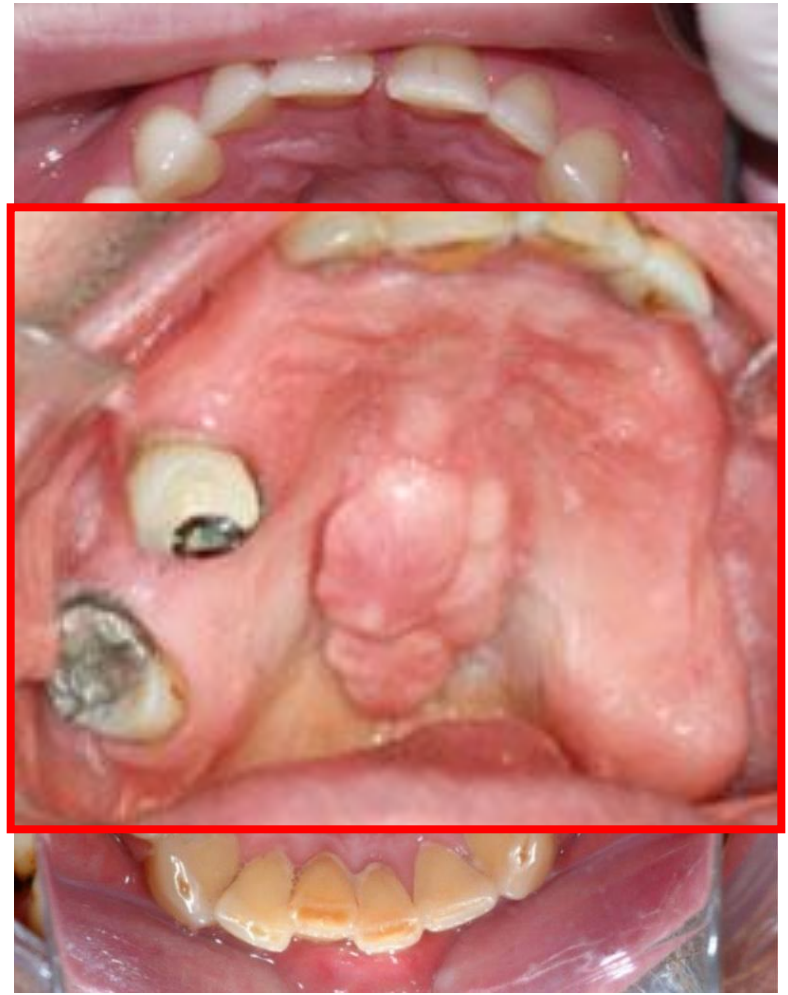
- “ Never” seen until sore throat
- Mirror view shows “ugly” area of raised convoluted tissue just over tongue horizon / lateral edge

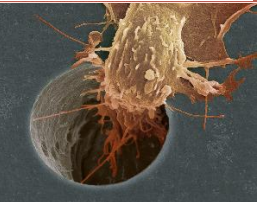




Lingual Tori / Palatal Tori

- Unchanging hard mucosal covered bony mass(es)
- Typical site , typical position
- Commonly unrecognised until trauma, exodontia
- Affect fit of denture
- May be noticed by new GDP, GP
- Cortical bony exostosis – innocent , easily treated





LOOSE TOOTH / TEETH

Lack of normal levels of support for dental structures.

MOST COMMON = Gum disease + bone loss.

?? Osteomyelitis / ORN etc

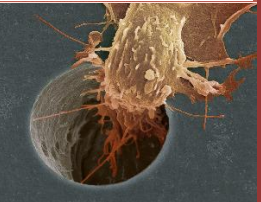
Tumour invasion of alveolar bone with, bone destruction and loosening of teeth, must be distinguished from periodontal causes.

Significant possibility of secondary tumours eg Breast, Prostate, Thyroid Ca

ILL FITTING DENTURES

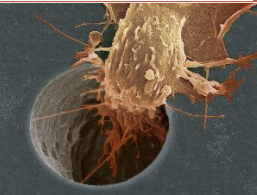
Due to displacement of flanges by soft tissue masses – or just “tired” dentures / atrophic alveolus??





Ulcers





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ULCER

(Medicine / Pathology)

- a disintegration of the surface of the skin or a mucous membrane resulting in an open sore that heals very slowly

A break in the skin or a mucous membrane, accompanied by inflammation, pus, and loss of tissue

*“ Mouth Ulcers heal in 14d if treated ,
2 weeks if untreated “*

HENCE – 3 wks cutoff for TWW suspicion



Q – Duration, ? Soft or Hard ? Contact Bleeding ? Edge ?



Recurrent Aphthous Ulceration

Minor

Major

Small

Large

Painful - "sore"

Pain +++

Multiple, Few

Solitary

Yellow slough base

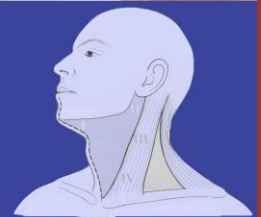
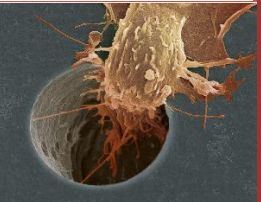
Large necrotic base

Surrounding red

Weeks to heal,

Heal slowly

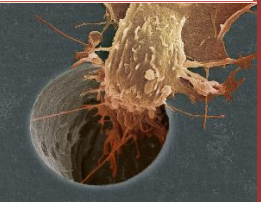
with scarring





Traumatic Ulcer

- Teeth
- Fillings, new / broken
- Broken enamel
- Denture clasps
- Habits
- Rubbing Denture base
- Atrophic alveolus
- Muscle attachments





FEATURES OF A TYPICAL ORAL CANCER

Lump or ulcerated lump

Painless

Present for 4-6 wks

Steadily growing

Surface may bleed

Pt presents only when function affected / concerned / pain starts

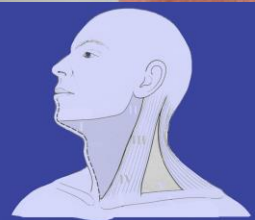
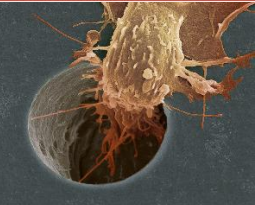
Firm , raised, rolled edge

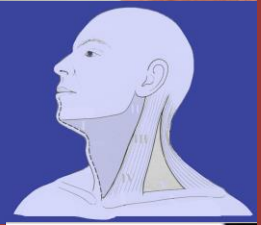
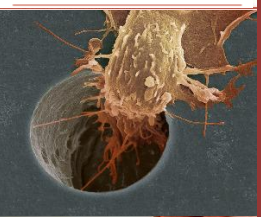
Base granular, friable or hard

Earache if tongue affected

Possible palpable nodes in neck

Pain if Bone affected, sensory loss or tooth mobility





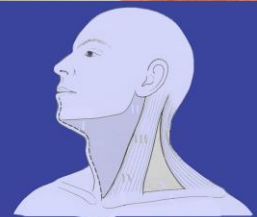
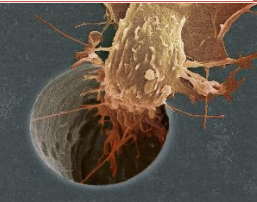
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Patches

Of the Oral Mucosa



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WHITE PATCH

Materia Alba

Cellular, food or other debris with white appearance – removable

Candida

Wipes off, underlying erythema

Hyperkeratosis

Due to friction, cellular change or response to irritant

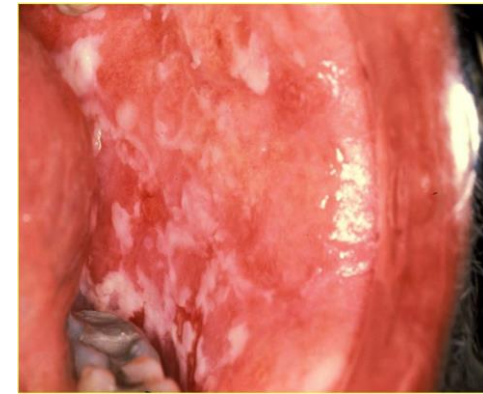
Leukoplakia

A white patch on a mucous membrane that will not rub off, not explained by other factors.

What is its character?

Homogeneous

Heterogeneous



Heterogeneous, poorly defined,
+/- contact bleeding most sinister

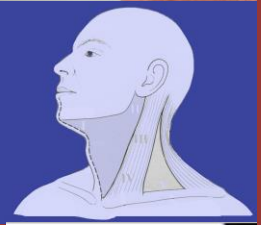
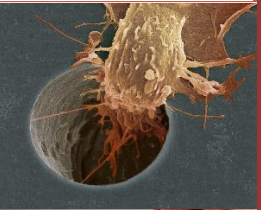


RED AREA / PATCH

Erythroplakia is a flat red patch or lesion in the mouth that cannot be attributed to any other pathology. A similar term is "erythroplasia", which has a papular appearance.



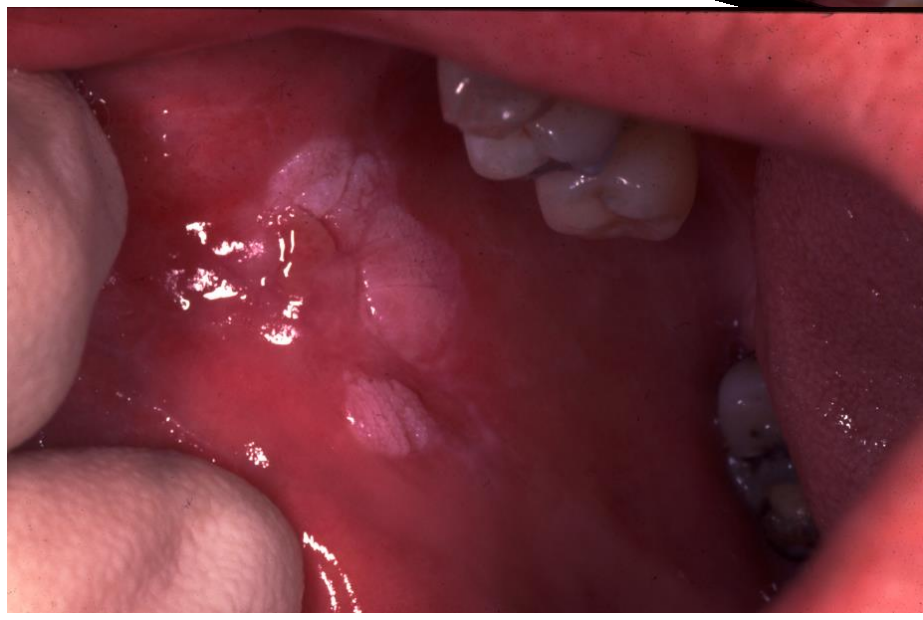
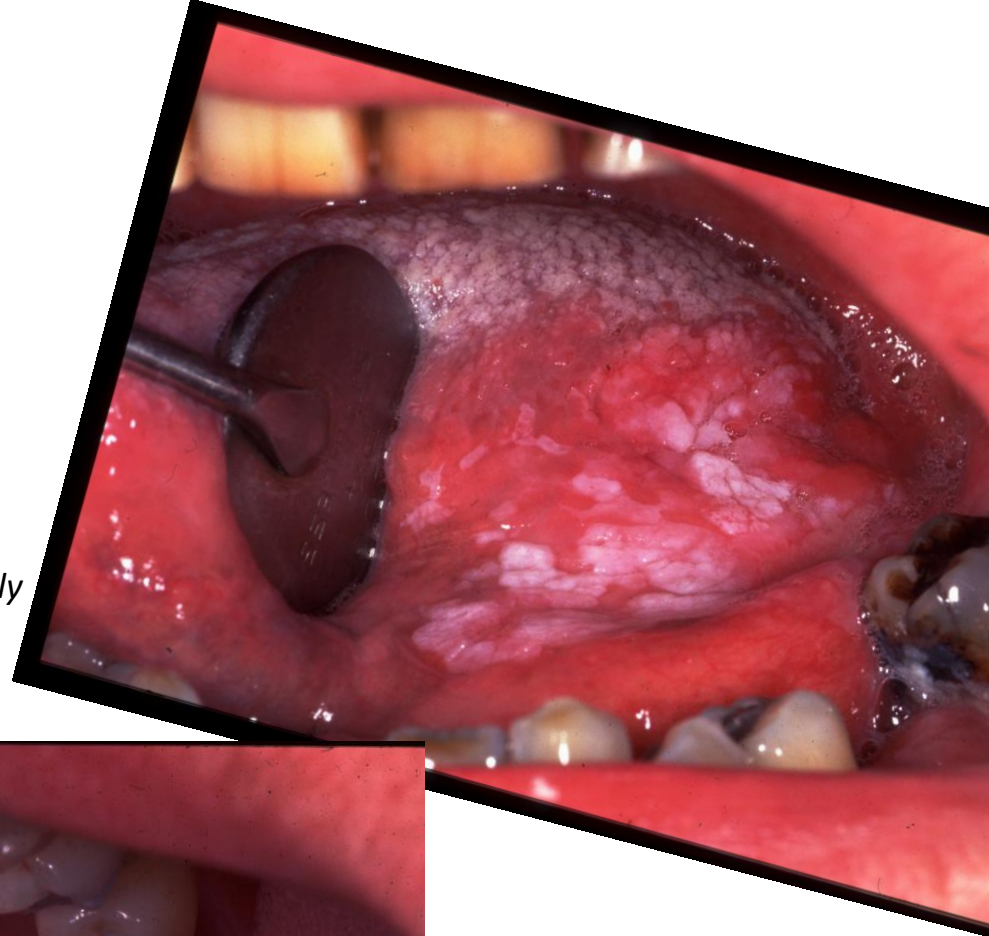
These lesions can be innocent, but unless transient, they merit investigation and consideration of biopsy.



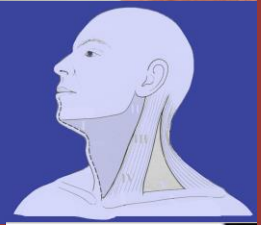
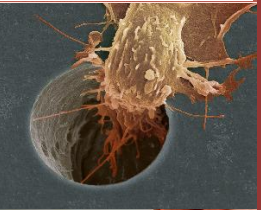


SPECKLED AREA / PATCH

Components of White *and* Red
(leukoplakic and erythroplakic)
appearance –likely to be *more severely*
dysplastic and has *higher risk of*
progression to malignancy

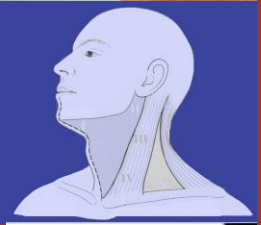
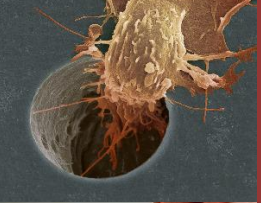


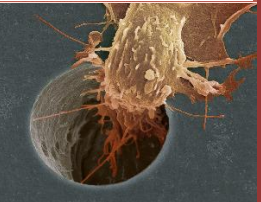
Referral +/-
Biopsy is
justified





Lichenoid Patches





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Lumps

In the mouth

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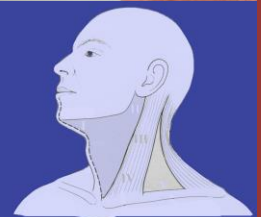
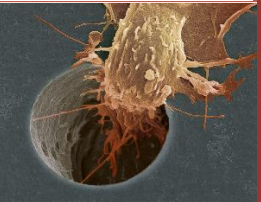


Fibroepithelial polyp



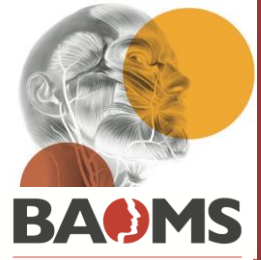


Fibroepithelial polyp



Syn. "Denture Granuloma"





Mucocoele

Either
Mucous Retention Cyst,
Mucous Extravasation Cyst

Or
Ranula
[associated with sublingual gland]



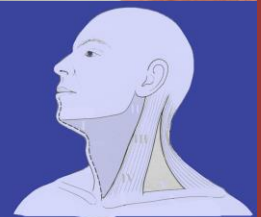
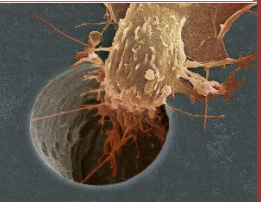


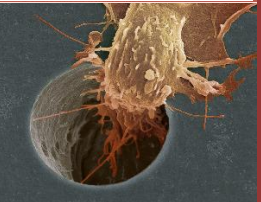
Salivary Tumours

Minor salivary glands
dotted throughout
the oral mucosa

- Can cause
- Salivary Adenoma [benign]
- Mucoepidermoid Ca
- Adenoid Cystic Ca

And other rarer variants





Lumps

Of the Face



LUMP / MASS

(Medicine / Pathology)

any small swelling or tumour of tissues

Site

Size

Shape

Surface

Texture

Tethered

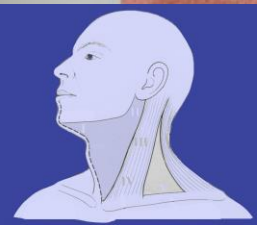
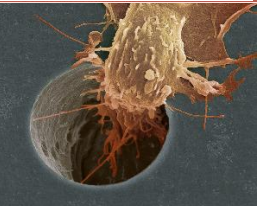
Fixity

Anatomical location

PLUS

? Intraoral or Other

Findings?



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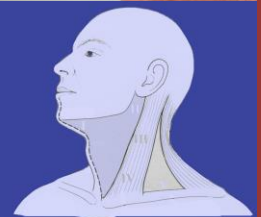
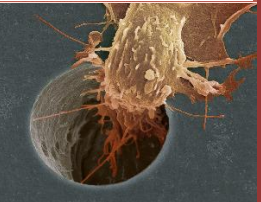
Salivary Gland Cancer

- Relatively rare
- 2 cases per 100,000 in USA
- 66% in age 55+, peak age 64yrs
- Survival strongly depends on stage at diagnosis



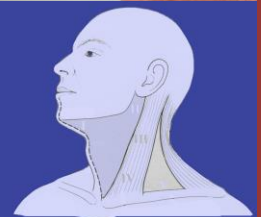
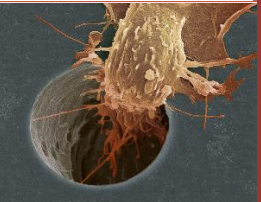
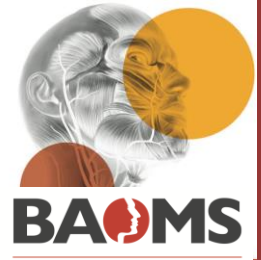
- | | | |
|----------------------|--------------|------------|
| • Early stage | 5yr survival | 96% |
| • Nodal spread | 5yr survival | 73% |
| • Distant metastases | 5yr survival | 37% |

American Cancer Society 2009



Facial Pain

Or Sensory Alteration



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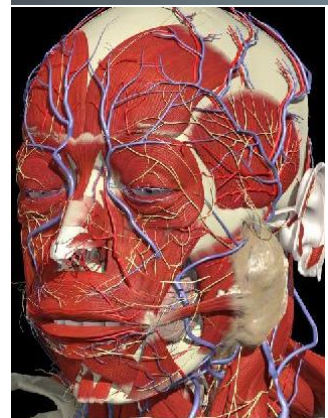
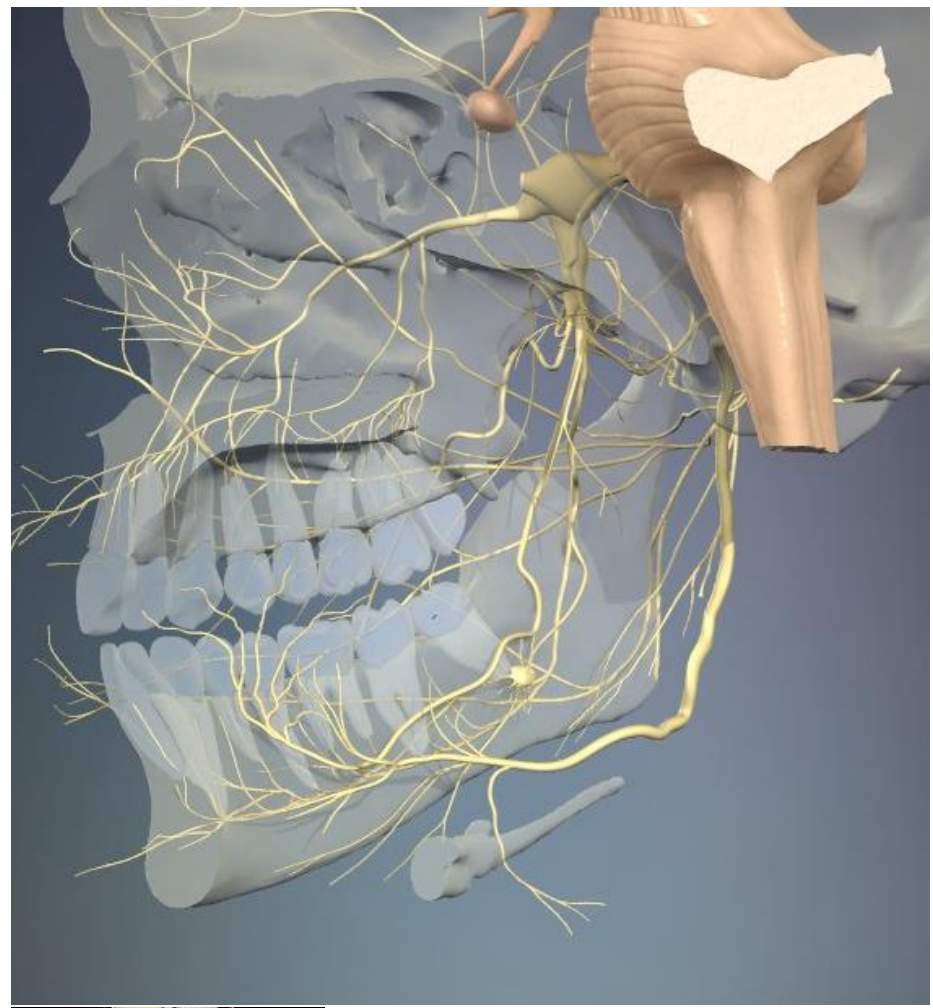
NERVE SENSORY LOSS

Impaired, abnormal or absent sensory function in the distribution of a peripheral or cranial nerve

Commonly in
Ophthalmic, maxillary or mandibular divisions of Trigeminal (Vth Cranial) nerve

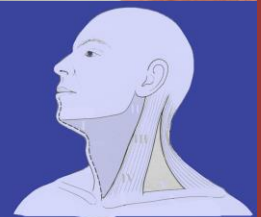
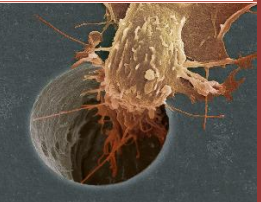
Indicative of malignant impingement or infiltration of the nerve trunk

Invasion of maxillary antrum or mandible



Unexplained numb lip, tongue or cheek – High degree of suspicion

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NERVE MOTOR WEAKNESS

Impaired, abnormal or absent motor function in peripheral or cranial motor nerve

Commonly in

Temporal,

Zygomatic,

Buccal,

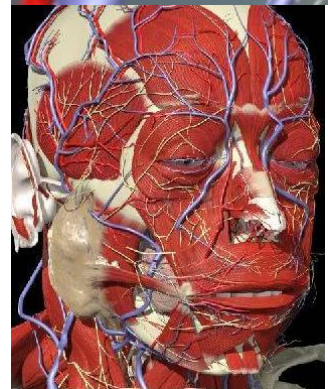
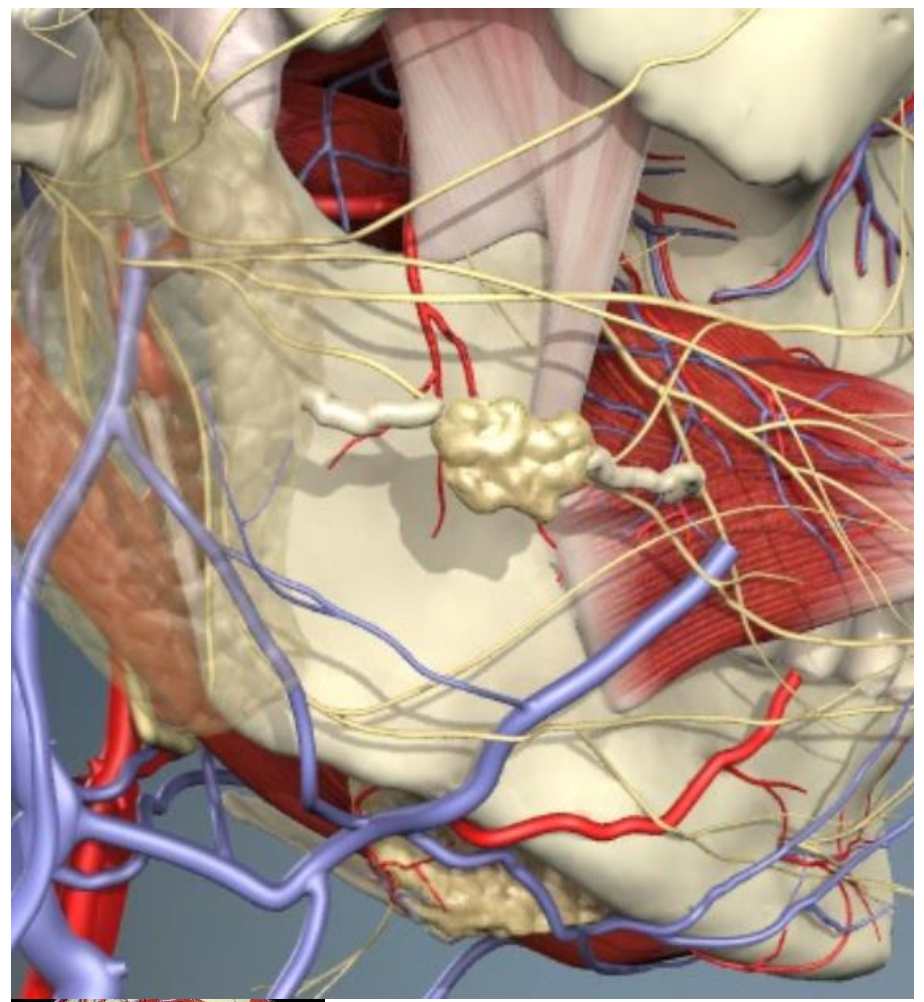
Mandibular

Cervical branches of VIIth (Facial) N

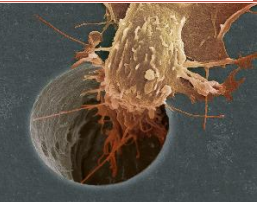
Indicative of malignant impingement or infiltration of the nerve trunk,

Usually in Parotid region , can be in Temporal bone or Intracranial

High suspicion of malignant parotid mass if Bells Palsy excluded



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SWALLOWING DIFFICULTY

Syn “dysphagia”

Difficulty in swallowing various textures of food

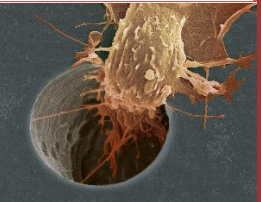
May be progressive, possibly with cough or spluttering, even pneumonia

Can be due to **Base of tongue, hypopharynx, larynx or oesophageal types of H&N Ca.**

Secondary tumours may cause neuromuscular problems due to metastatic disease affecting motor nerves

PROGRESSION TO STRIDOR IS A SURGICAL EMERGENCY





Jaw Movement

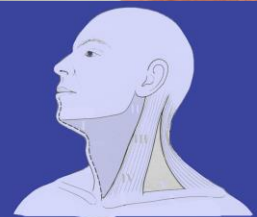
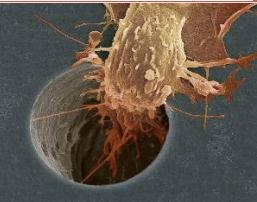


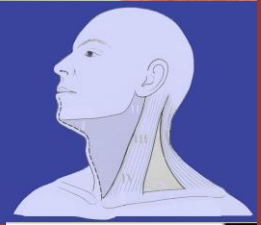
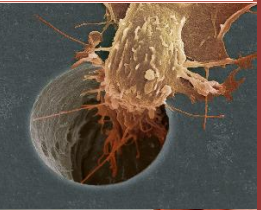
Jaw Symptoms

- Jaw clicks are COMMON
- Transient locking is COMMON
- Stiffness, mild discomfort is COMMON
- Short term joint pain is COMMON

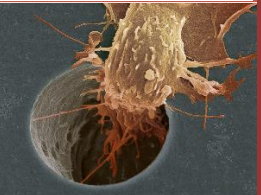
- Persistent symptoms – refer DENTIST

- TMJ Refractory to TREATMENT – refer Hospital

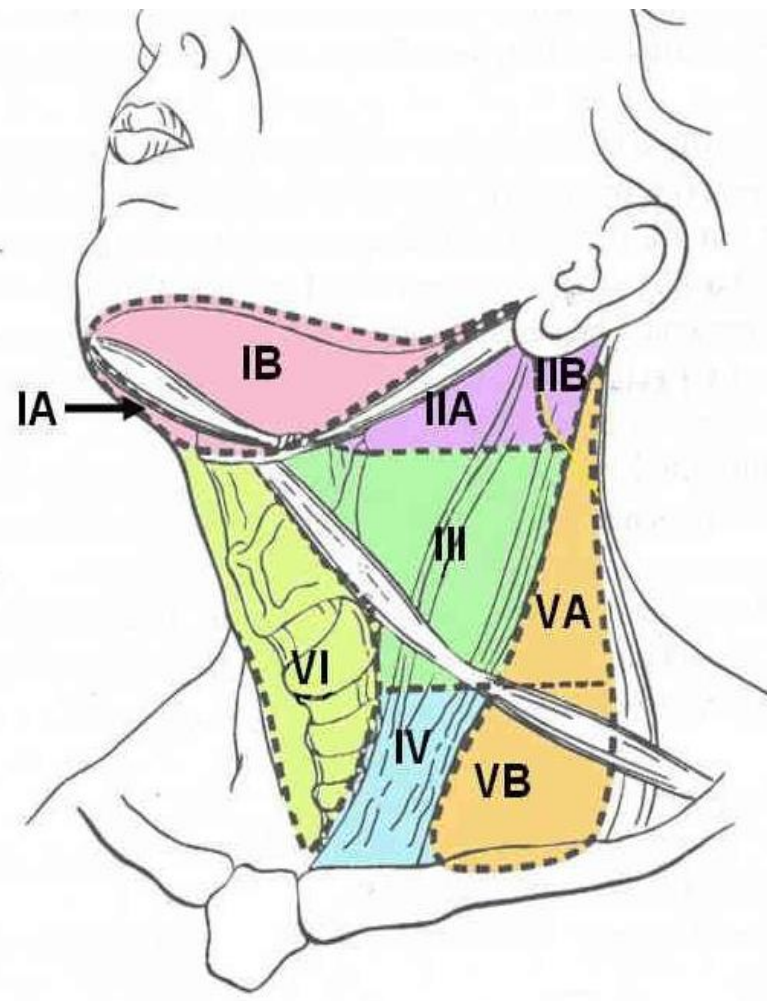




Neck Lumps



Made in Sheffield



Examination of the neck

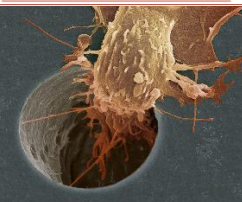
Taught @ MB

Easily performed

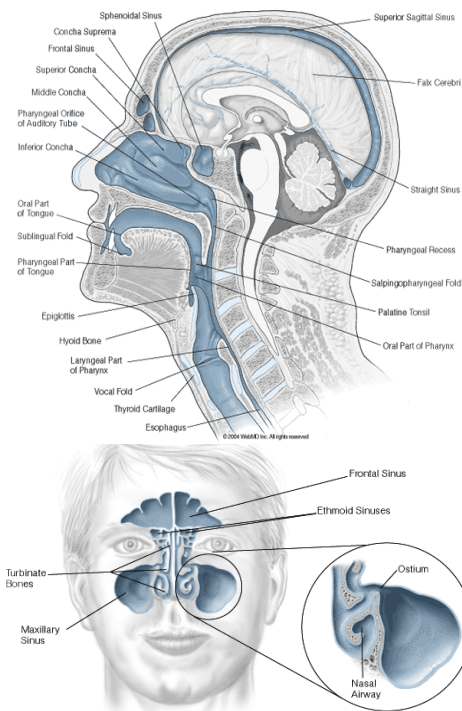
Better with practice

austensmith@shef.ac.uk

Nodal Patterns of Drainage

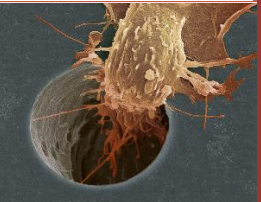


Made in Sheffield

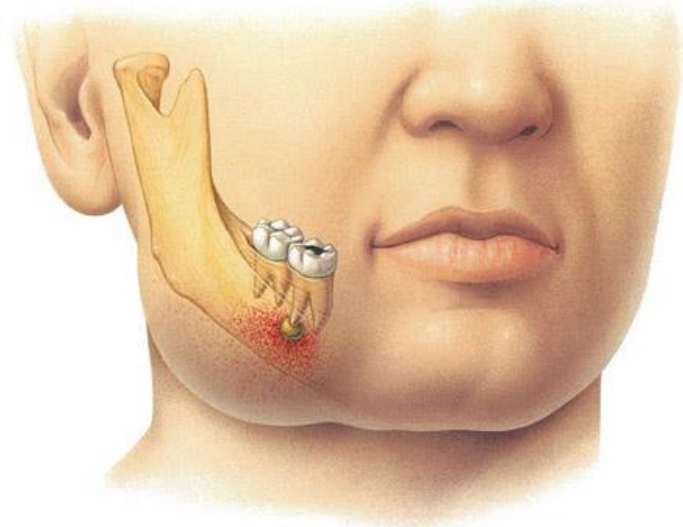


Occipital	drains	Post. scalp behind line joining tragus to tragus
Postauricular	drains	Post. scalp, mastoid region and posterior pinna
Parotid	drains	Extraglandular – Ant. scalp Intraglandular – Scalp and Parotid region
Retropharyngeal	drains	Post. nasal cavity, sphenoid, ethmoids, palate, nasopharynx, Post. pharyngeal wall
Level Ia	drains	Menton, Ant. Gingivae, Middle 2/3 lower lip, Ant. Tongue
Level Ib	drains	Ipsilat. Upper and lower lip, cheek, nose Med. Canthus, Oral cavity to tonsil
Level II a&b	drain	Oral cavity, nasal cavity naso-, oro-, hypo-pharynx, larynx & parotid
Level III	drains	Oral cavity, nasal cavity naso-, oro-, hypo-pharynx, larynx
Level IV	drains	Hypopharynx, thyroid, cervical oesophagus & larynx
Level V	drains	Nasopharynx, oropharynx, Post. scalp & neck skin
Level VI	drains	Thyroid, glottis, subglottis, pyriform fossa cervical oesophagus

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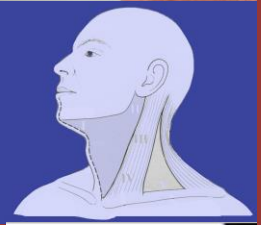
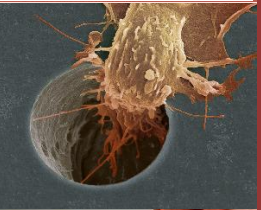


Dentofacial Infections





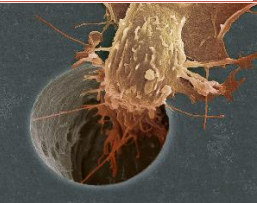
Dentofacial Infections



H&N Skin Ca



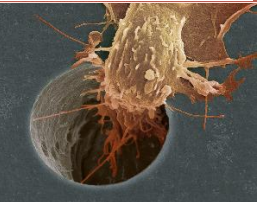
- SCCa common in actinic damaged skin (scalp, nose, ears)
- Early diagnosis and simple treatment is effective
- Main problem if deep structures / nodal involvement
- 22% of melanomas in men, 14% of melanomas in women are in H&N area
- Rare in children , rises with age, overall trend is for all types to increase to 2024





The Mouth - and other cancers

- Haemato-oncology patients
- Chemotherapy and immune suppression
- Distant metastases- non H&N Cancers
- Jaw effects of bone active drugs – BRONJ / MRONJ
- OsteoRadioNecrosis - ORN

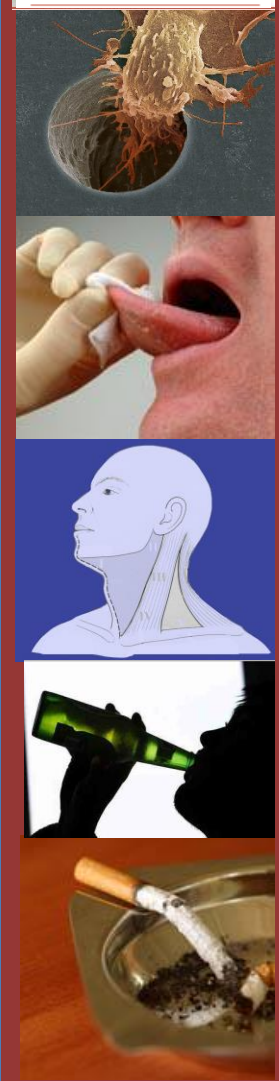




Stage at diagnosis – and 5yr survival figures

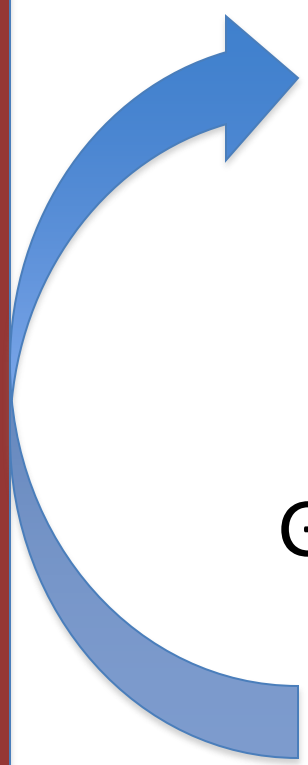
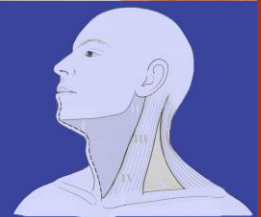
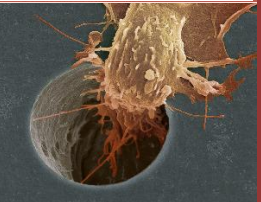
SITE	LIP	ORAL CAVITY	OROPHARYNX	PARANASAL SINUSES
STAGE I Disease	Approx 90%+	> 80%	60 – 70 %	60 – 70 %
STAGE II Disease	50 – 80 %	50 – 80 %	50 % + according to site	60 – 70 %
STAGE III Disease	20 – 50%	20 – 50%	20 – 30 %	25 – 35 %
STAGE IV Disease	< 20%	< 20%	14 – 20 %	10 – 25 %

- I Early disease
- II Locally advanced
- III Tumour in lymph nodes
- IV Metastatic





Detection by clinicians



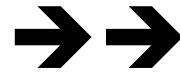
Education



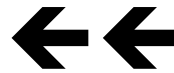
Awareness



Guidelines



Feedback



Experience



Familiarity



Suspicion



Referrals



Treatment

MOUTH CANCER REFERRAL GUIDELINES FOR GPs

For patients presenting with mouth complaints, you may wish to follow the procedure outlined below:

Step 1: Obtain the following information

- History of the complaint (including duration, site, size and description of the lesion)
- Social history (tobacco and/or high alcohol consumption greatly increases risk of oral cancer)
- Ask the patient when they were last examined by a dentist (registration lapses automatically after 15 months so if it is longer than this the patient is probably not registered)

Step 2: Carrying out an oral examination

- GPs should check patients' mouths for cancerous or pre-cancerous changes when suitable opportunities arise.
- You will need good natural light, a small torch or exam lamp.
- The patient should be seated and asked to remove any dentures.
- The photos below illustrate an oral examination. The extraoral and perioral tissues are examined first, followed by the intraoral tissues.
- Assessing patients for mouth cancer symptoms requires a high level of suspicion, but many other conditions may present with similar changes. On the right are examples of malignant and potentially malignant lesions.



1. Face 2. Lips 3. Left buccal mucosa



4. Gingiva 5. Tongue dorsum 6. Tongue - left margin



7. Tongue ventral 8. Floor of mouth 9. Hard palate



Fibroepithelial polyp of the buccal mucosa



Pseudomembranous candidosis of the buccal mucosa



Lichen planus of the buccal mucosa



White patch on ventral surface of the tongue



Solitary ulcer with rolled borders on the lateral border of the tongue



Red patch on ventral surface of tongue and floor of mouth



Speckled lesion on left buccal mucosa



Shallow ulcer on lower lip

NON-URGENT

PROMPT REFERRAL

URGENT REFERRAL - within 2 weeks

MOUTH CANCER REFERRAL GUIDELINES FOR DENTISTS

Assessing patients for mouth cancer

- Patients should be examined for potential malignancy at every dental examination
- Assessing patients for mouth cancer symptoms requires a high level of suspicion, but many other conditions may present with similar changes. On the right are examples of malignant and potentially malignant lesions.
- The level of suspicion should be higher if the patient is a smoker or heavy alcohol drinker, chews betel nut (areca nut) or tobacco, or is over 40 years.

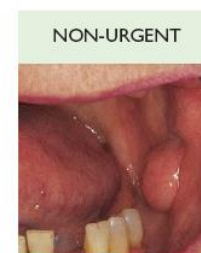
The Referral Process For Oral Soft Tissue Lesions

- If an abnormal area has been detected in the mouth, a biopsy is the only way to know for certain whether or not it is malignant. This should be carried out in a specialist referral centre of either oral medicine, oral and maxillofacial surgery or plastic surgery.
- Referrals should be divided into three categories (non-urgent, prompt and urgent) according to the urgency of the referral. The table opposite provides more detail on referral classification.

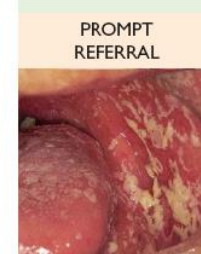
Referral details

It is essential for the consultant to know certain details about the patient, the lesion, and the clinical diagnosis, in order to prioritise the waiting list.

- Patient's details including current telephone number so the patient can be contacted to attend a clinic at short notice
- Short medical history including name and address of patient's general medical practitioner
- Relevant social history including smoking and drinking status
- Detailed description of the lesion including duration, site, size, colour, texture and findings upon palpation
- Clinical diagnosis (or diagnoses) in order to categorise the urgency of the referral



Fibroepithelial polyp of the buccal mucosa



Pseudomembranous candidosis of the buccal mucosa



Lichen planus of the buccal mucosa



White patch on ventral surface of the tongue



Solitary ulcer with rolled borders on the lateral border of the tongue



Red patch on ventral surface of tongue and floor of mouth



Speckled lesion on left buccal mucosa



Shallow ulcer on lower lip

NON-URGENT

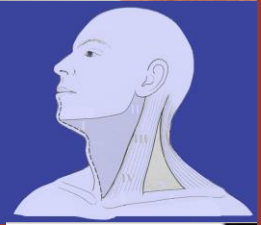
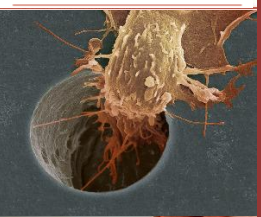
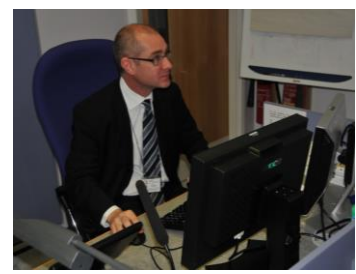
PROMPT REFERRAL

URGENT REFERRAL - within 2 weeks



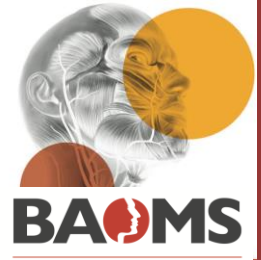
N. Trent & H&N (Oral) Cancer

- WAS Governed by N Trent Ca Network.....
- Single specialist MDT – Sheffield based
Barnsley, Sheffield, Rotherham, Doncaster, Chesterfield, Bassetlaw
- Centralised “Surgical Centre”
Royal Hallamshire Hospital
- Oncological Centre WPH
- Centralised from 2015.....

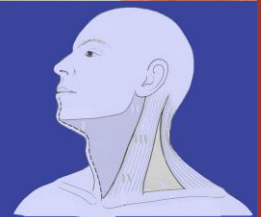


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Surgical management of Head & Neck Cancer





DECISION TIME !! Picture Quiz

Consider nature and likely significance / urgency

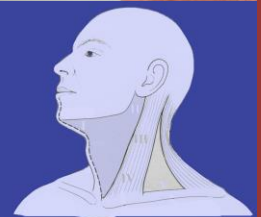
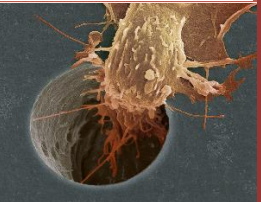
Choose from :

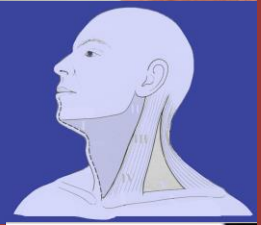
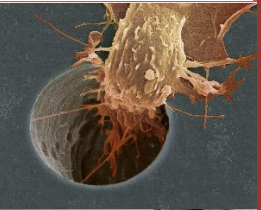
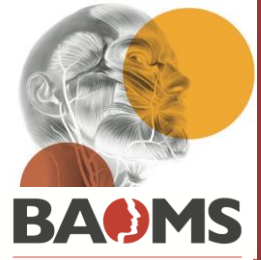
- ROUTINE

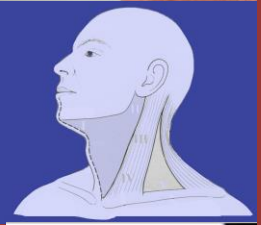
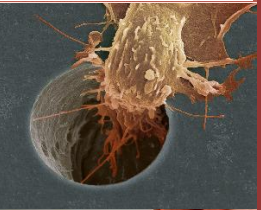
- URGENT

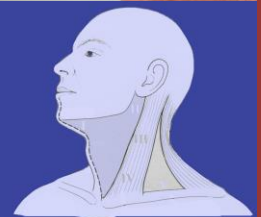
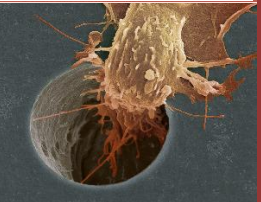
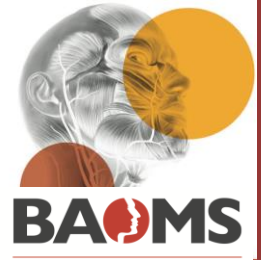
- TWW (Ca Pathway)

- EMERGENCY - 999









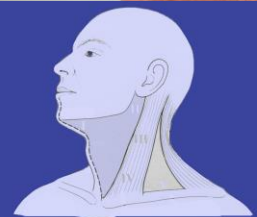
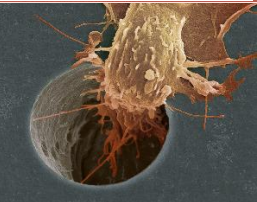


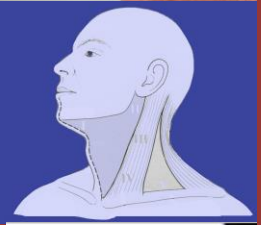
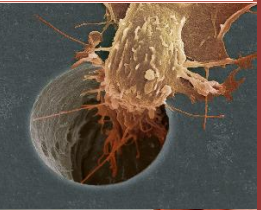
Dentists' role?

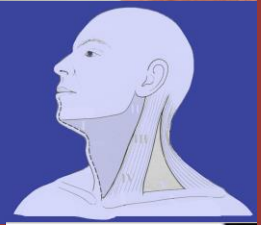
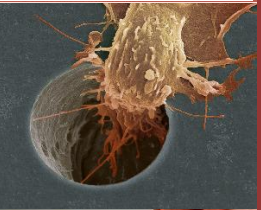
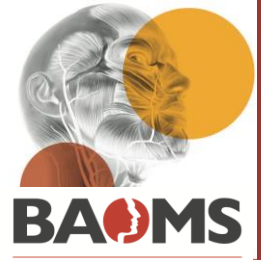
“Around one in five of all referrals - 21 per cent - for cancer of the mouth are made by dentists and community dental services, demonstrating the importance of general dental services in screening for oral cavity cancer”

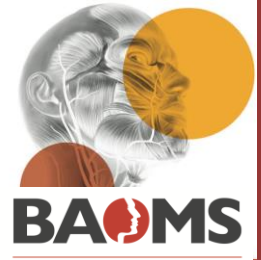


DAHNO 2nd report Oct 2005 – Nov 2006

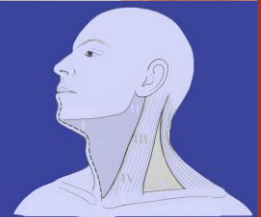
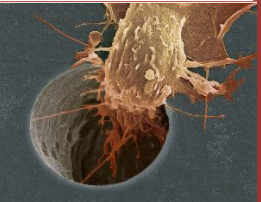


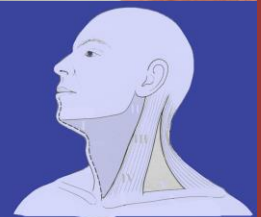
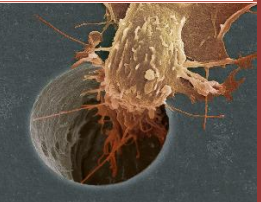






Success





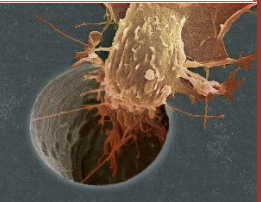
JP - FULLY REHABILITATED

Major resection including hemimandibulectomy

Scapular composite flap

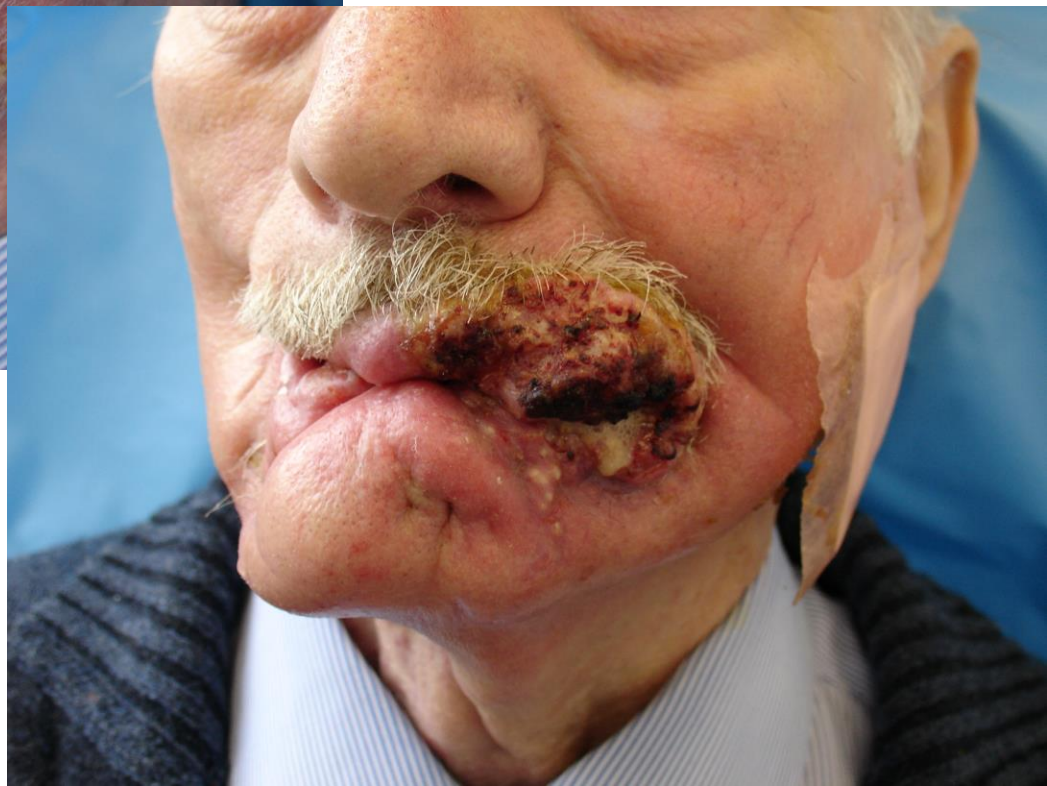
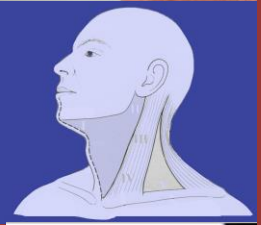
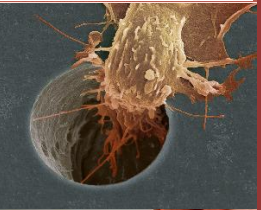
Implants and fixed prosthesis

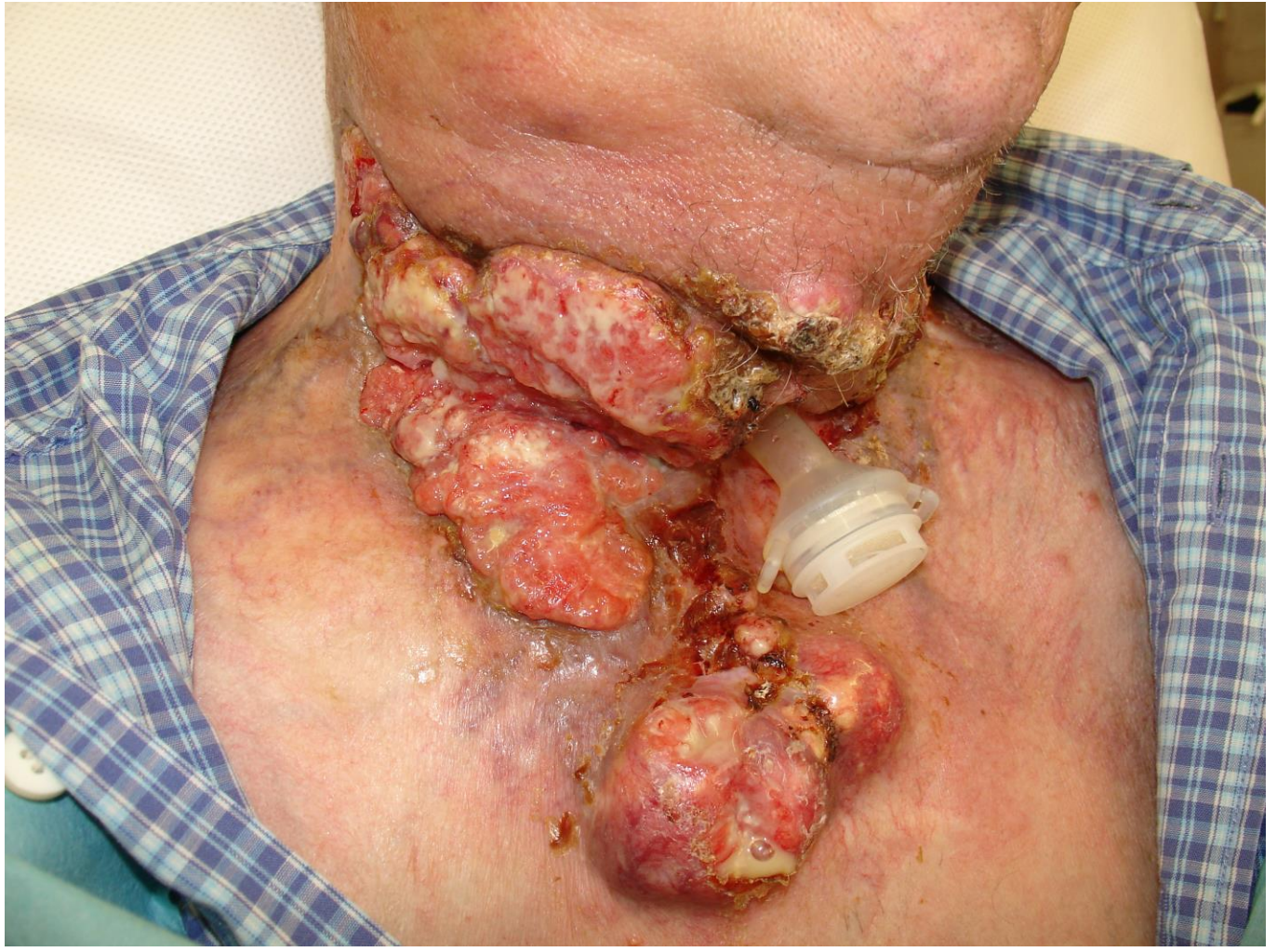
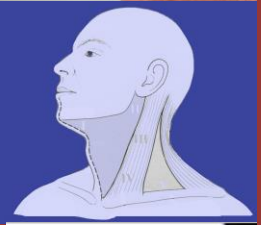
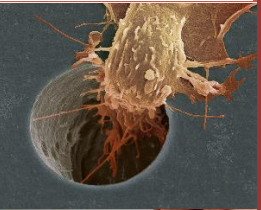
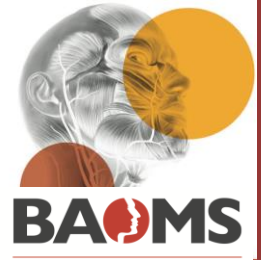




FAILURE







Austen SMITH

**Consultant OMFS / H&N Surgeon,
Sheffield and Barnsley Hospitals
Lead Trainer OMFS Sheffield,
Hon Sen Clin Lecturer,
University of Sheffield, UK**

Oral Lesions

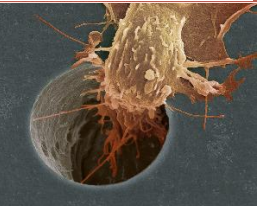
**Presentation, Pathology...
& the Practitioner**

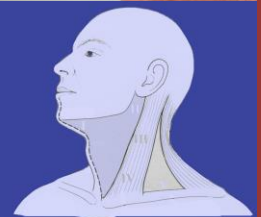
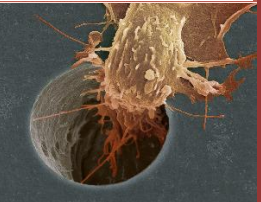
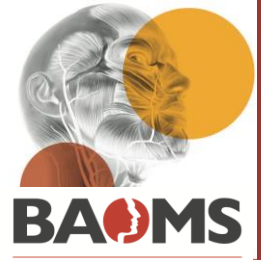




SOURCES

- Trent Cancer Registry Reports
- National Ca Reform Strategy (Dec 2007)
- Manual for Ca Services (Peer Review Measures 2004)
- Healthy Expectations 5yr commissioning strategy for Barnsley (April 2009)
- NHS Barnsley Local Ca Needs Assessment (2008-9)
- Cancer Improving Outcomes Guidance (IOG) 2007, 2011
- Vital Signs Targets
- N Trent Ca Network Plan (2009)
- NTCN Reducing health inequalities- Awareness and Earlier detection of Cancer (2009-12)
- Awareness & Early Diagnosis Initiative (2011)
- NHS Outcomes Framework 2011-12
- 8th DAHNO Report /NCIN publications 2013
- BAOMS Guidance Oral Cancer





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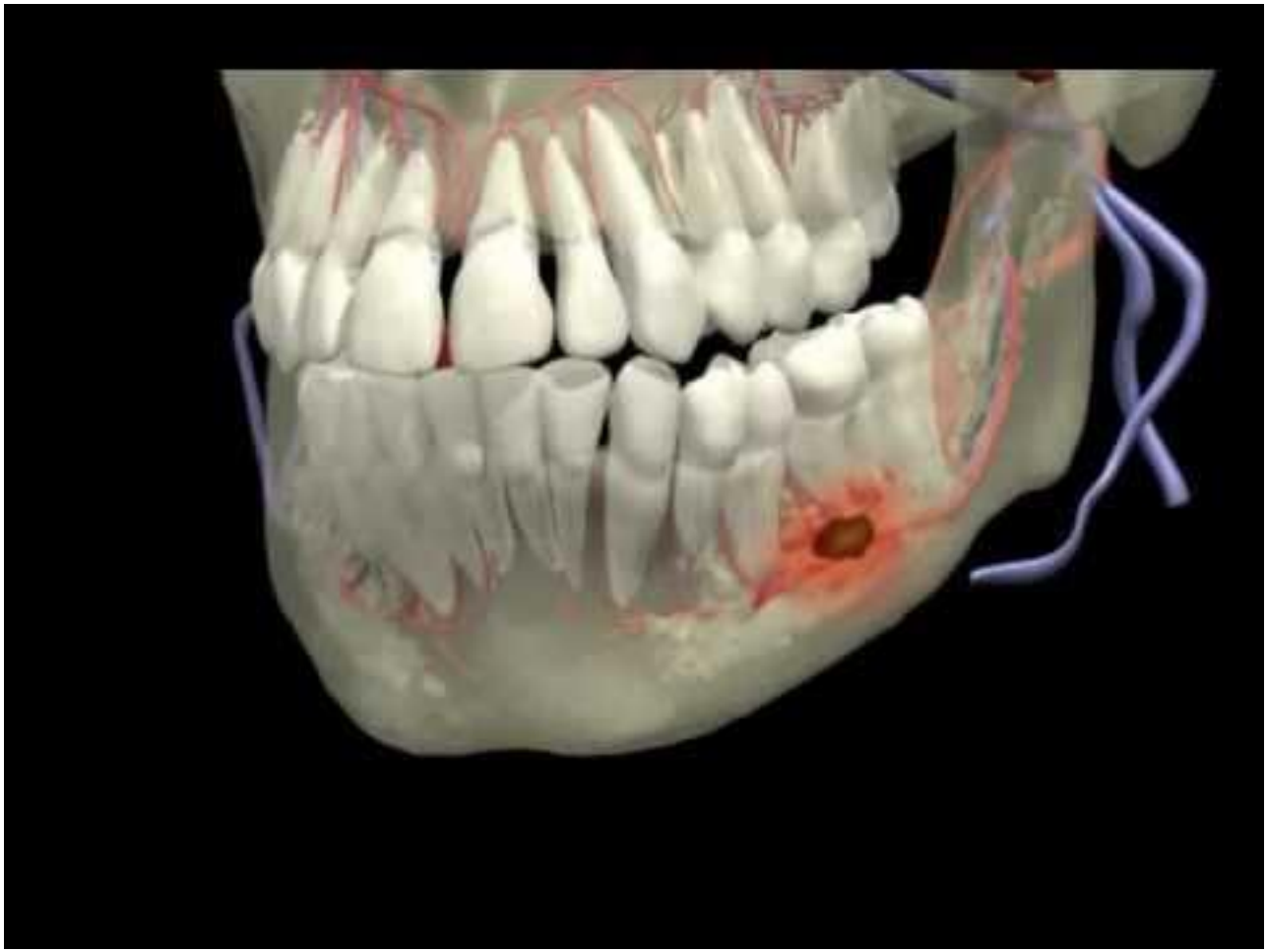
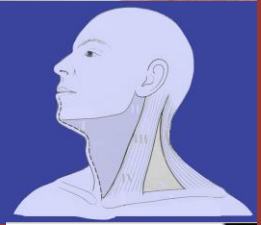
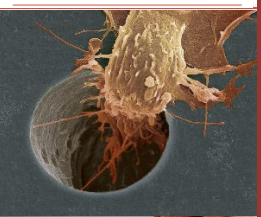
Referral



- **URGENT** – and **"SUSPICIOUS OF CANCER"**
(" 2 Week Wait" - TWW)
- **Urgent** – non malignant Δ
- Routine



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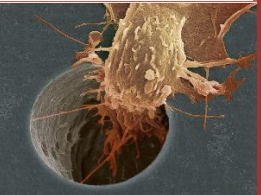




Cancer in South Yorkshire

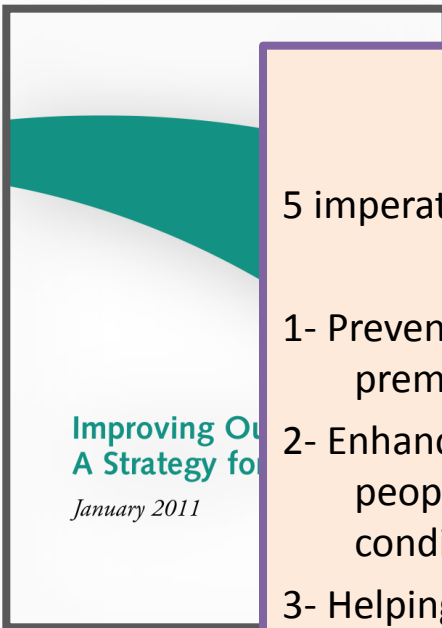


- Around 30% of Ca deaths aged < 75
- Some areas of significant deprivation
- Disadvantaged areas have higher incidences of Cancer
- This applies to H&N / Oral Ca, *and* outcomes are worse for lowest socio-economic groups
- Relevant to Barnsley



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“What’s New ...?”



5 imperative *Domains*

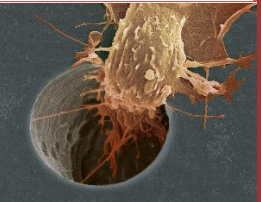
- 1- Preventing people from dying prematurely
- 2- Enhancing quality of life for people with long term conditions
- 3- Helping people to recover from episodes of ill health
- 4- Ensuring people have a positive experience of care
- 5- Treating / caring for people in a safe environment , protecting from avoidable harm

Uplift public awareness of signs of cancer




Improve referral rates

Improve conversion / detection rates


Use data to target practices.....?




Referral guidance

Cancer in Primary Care
A GUIDE TO GOOD PRACTICE



EXECUTIVE SUMMARY


 National Institute for
 Health and Clinical Excellence

Issue date: June 2005

Referral guidelines for
suspected cancer

Clinical Guideline 27
Developed by the National Collaborating Centre for Primary Care



Dentists' role?

“Around one in five of all referrals - 21 per cent - for cancer of the mouth are made by dentists and community dental services, demonstrating the importance of general dental services in screening for oral cavity cancer”



DAHNO 2nd report Oct 2005 – Nov 2006

