

„ACCURATE DIAGNOSIS IS THE ONLY
TRUE CORNERSTONE ON WHICH
RATIONAL TREATMENT CAN BE BUILT.”

C Noyek

Oral diagnostics

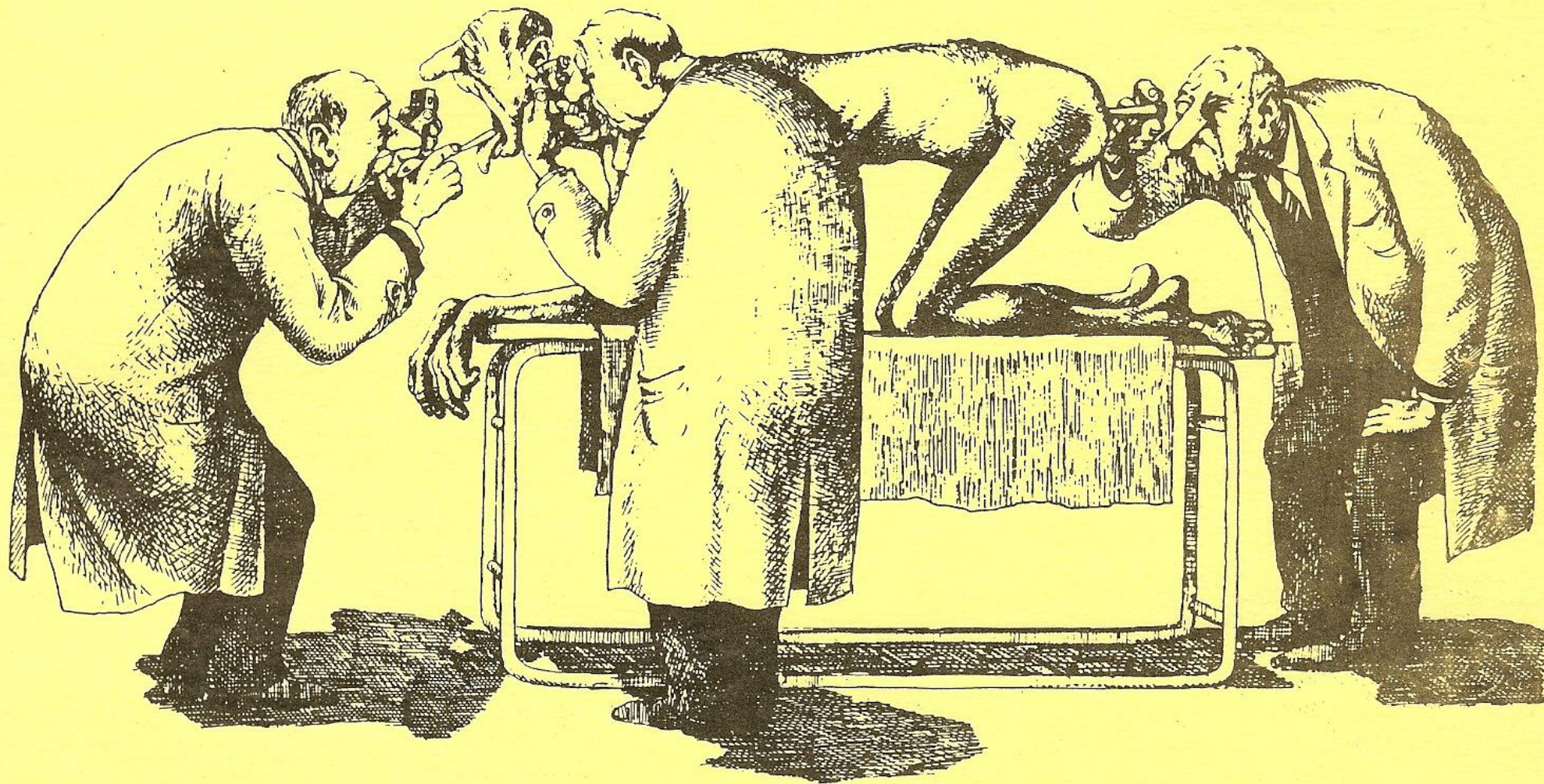
Definition of the discipline

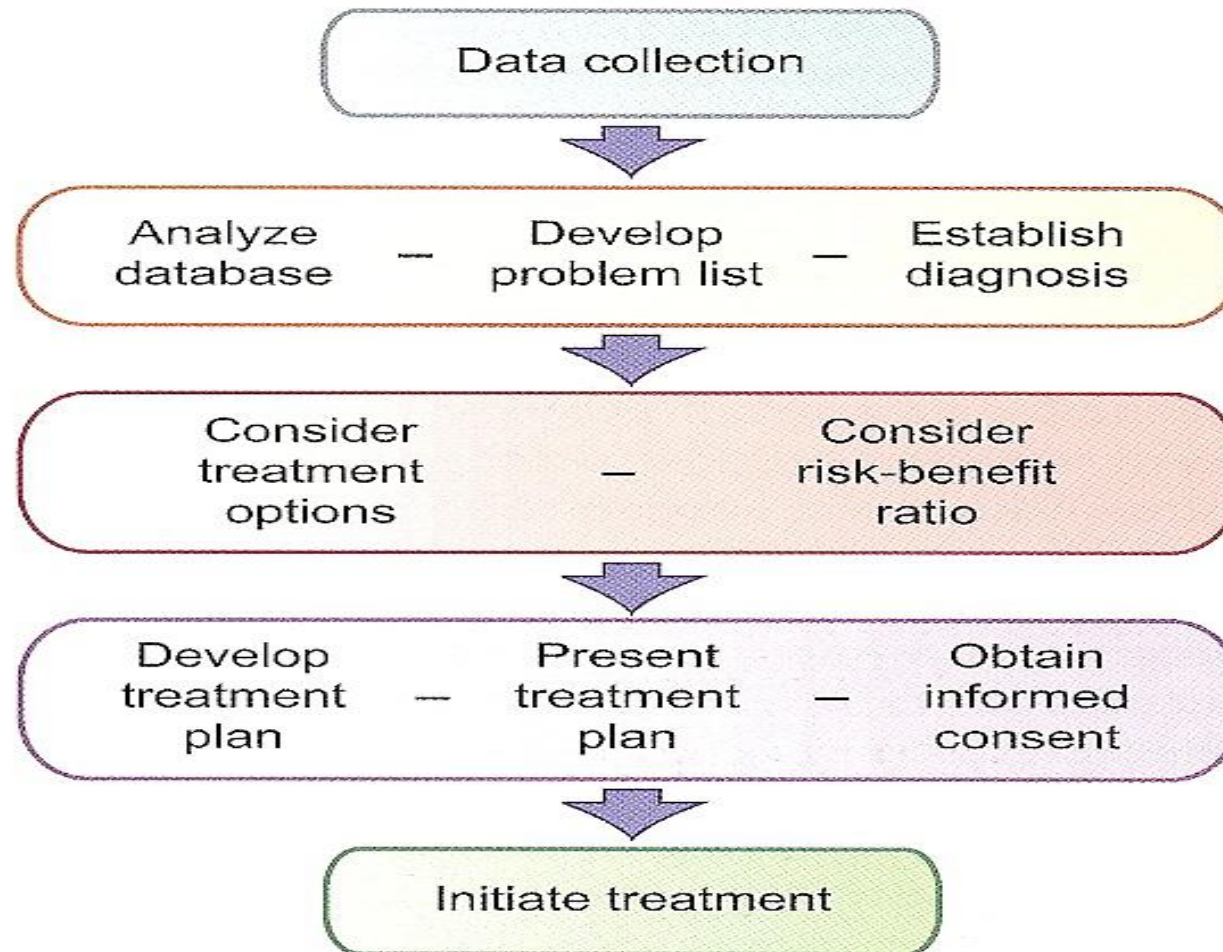
That area of dentistry, the which deals with gathering, recording and evaluating information contributing to the identification of abnormalities of the head and neck region.

The purpose of obtaining this information is to establish a diagnosis, from which a rational treatment plan can be formulated.

Oral diagnostics ?







Collecting Diagnostic information

Patient history

Physical examination

Adjunctive diagnostic procedures

Physical examination

- **General physical appraisal**
 - vital signs (pulse, blood pressure, respiration, body temperature)
- **Extraoral examination**
- **Intraoral examination**

Adjunctive diagnostic information

- **Radiographic examination**
- **Clinical laboratory studies**
- **Histology**
- **Microbiologic studies**
- **Consultation and referrals**

Evaluation of Diagnostic information

- **Organizing diagnostic information**
 - Physical assessment
 - Dental conditions
 - Non-dental conditions
- **Preliminary Decisions Concerning Diagnostic information**
 - relationship, reliability, consistency, clinical significance

Diagnosis

- **Health status**

compromised health, allergy; medications;
suspected systemic disease

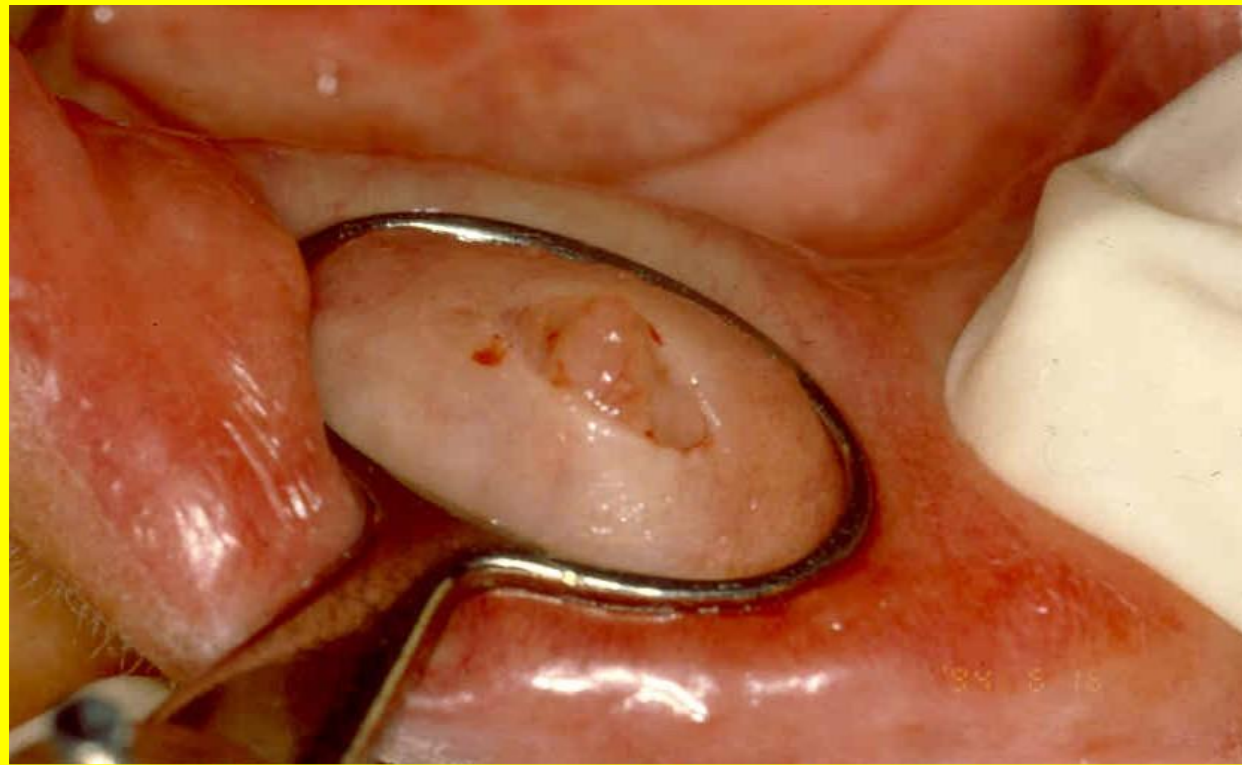
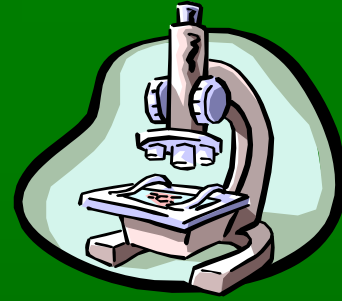
- **Dental Disease**

caries, pulp involvement gingivitis, periodontitis,
periapical lesion due to pulp necrosis;
developmental problems

- **Non-dental diseases**

mucosal lesions, tissue enlargements; bone
lesions, clinical syndromes

Histological examination





Steps of Head and Neck examination

- **Informing the patients on receiving a comprehensive exam**
- **Taking a complete medical and dental case history**
- **Inspection: extraoral, intraoral**
- **Using some adjunctive methods (lupe, vital staining, brush biopsy, fluorescences devices)**
- **Recording and documentation of all findings (photos, if needed)**
- **Inform the patients about the findings (both positive and negative), and next steps of further action**


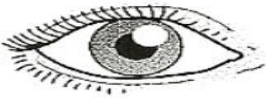


| | |
|--|---|
| <p data-bbox="454 325 556 354">Listen</p>  | <p data-bbox="1241 315 1364 372">History Speech</p> |
| <p data-bbox="461 619 605 648">Observe</p>  | <p data-bbox="1198 611 1397 668">Appearance Behaviour</p> |
| <p data-bbox="465 915 567 943">Touch</p>  | <p data-bbox="1209 901 1418 958">Induration Temperature</p> |
| <p data-bbox="470 1208 567 1236">Smell</p>  | <p data-bbox="1241 1208 1397 1236">Malodour</p> |

























Figure 2-21 Palpation of the supraclavicular notch.



Figure 2-23 Measuring the InterIncisal opening.



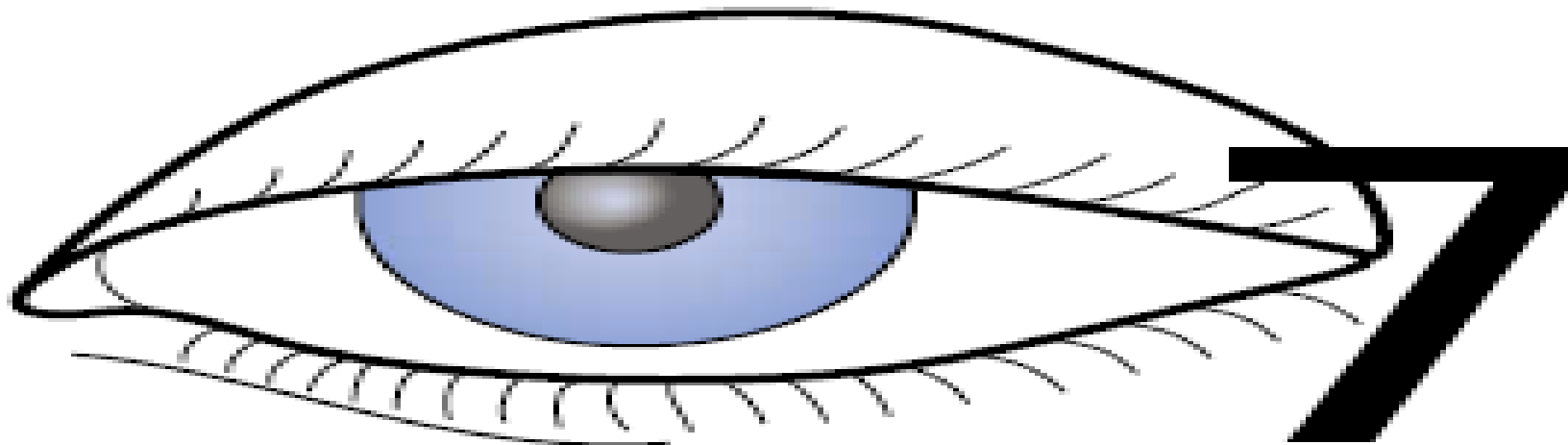
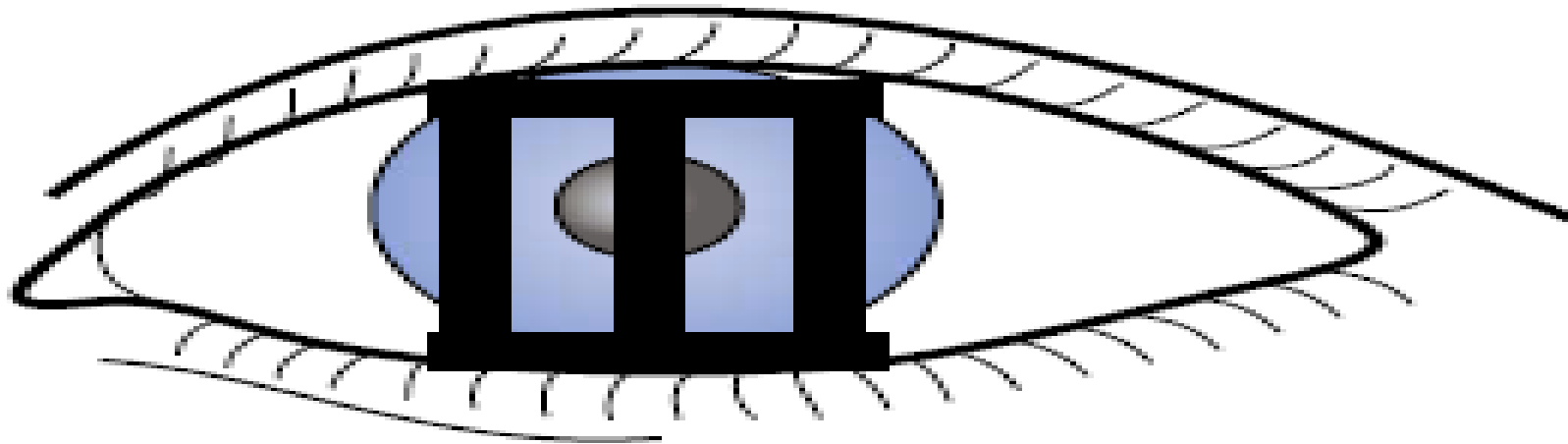
Figure 2-22 Muscle palpation tenderness assessment of the masseter.







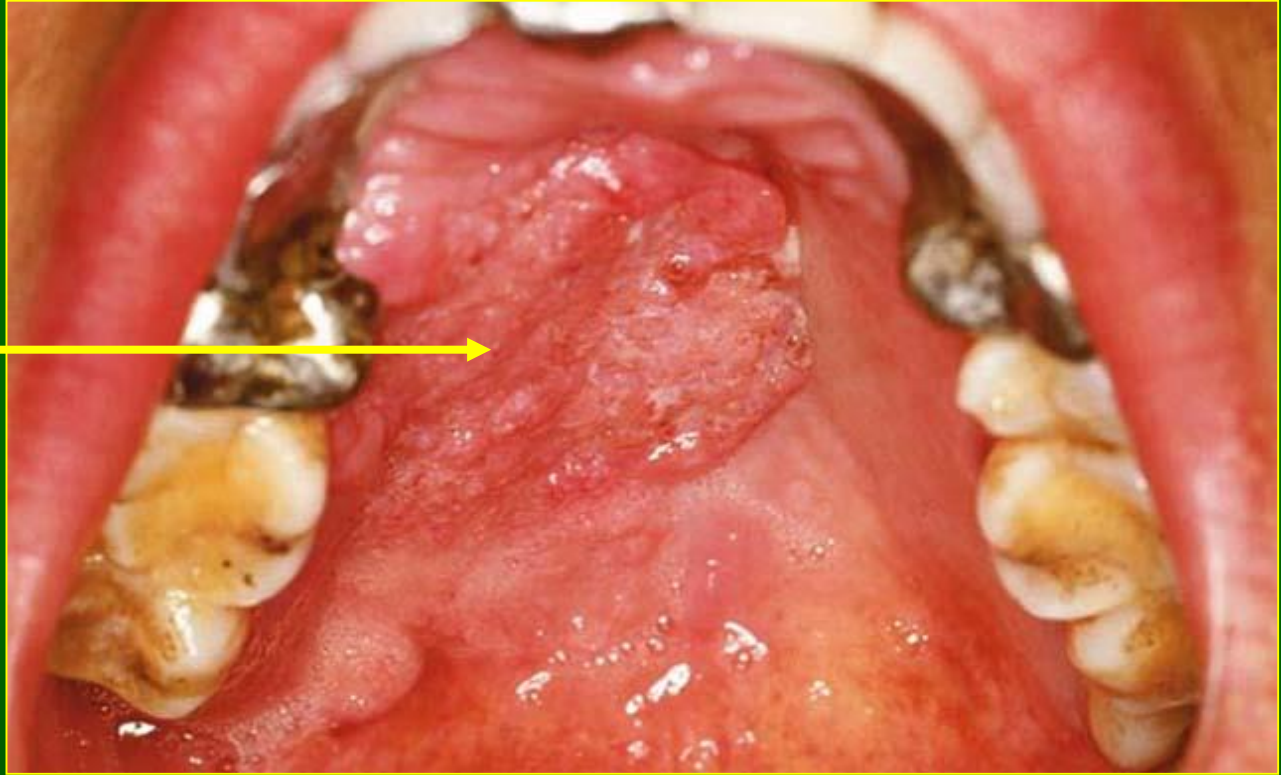
Third nerve supports and elevates upper lid



Seventh nerve closes upper lid

Figure 2-32 The oculomotor nerve, like a pillar, raises the upper lid; the facial nerve, like a hook, closes the lid.

Intraoral examination



Steps of stomato-oncological examination

I. Case history

II. Extraoral inspection, palpation

III. Intraoral examination

1. Lips
2. Buccae
3. Attached gingiva
4. Tongue
5. Floor of the mouth
6. Palate
7. Pharynx

IV. Intraoral palpation



We are looking for :

- Tissue excess
- Tissue defect (atrophy, ulceration)
- Alterations in color (mainly white and red)

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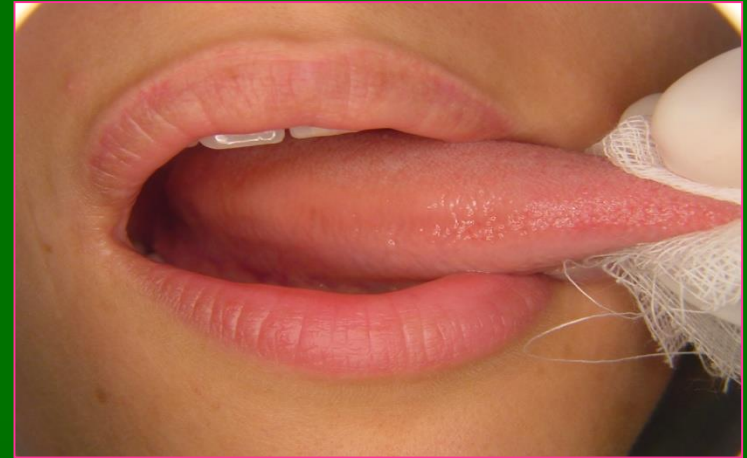
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Preliminary classification of mucosal lesions



Normal, anatomical variation

***Pathological* lesion**

- **Bilateral symmetry**
- **Typical localisation**
- **symptomless**
- **Unchanged**
- **Age:elder**

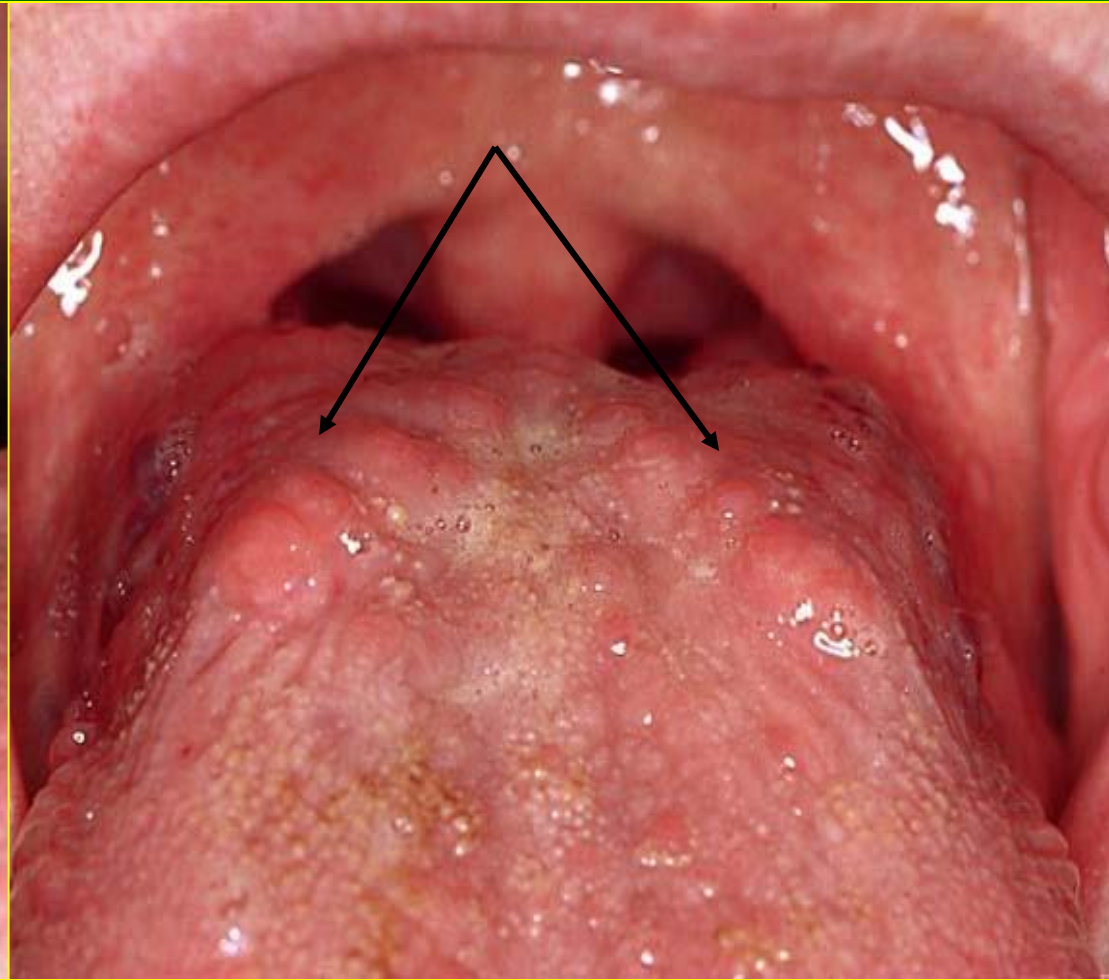
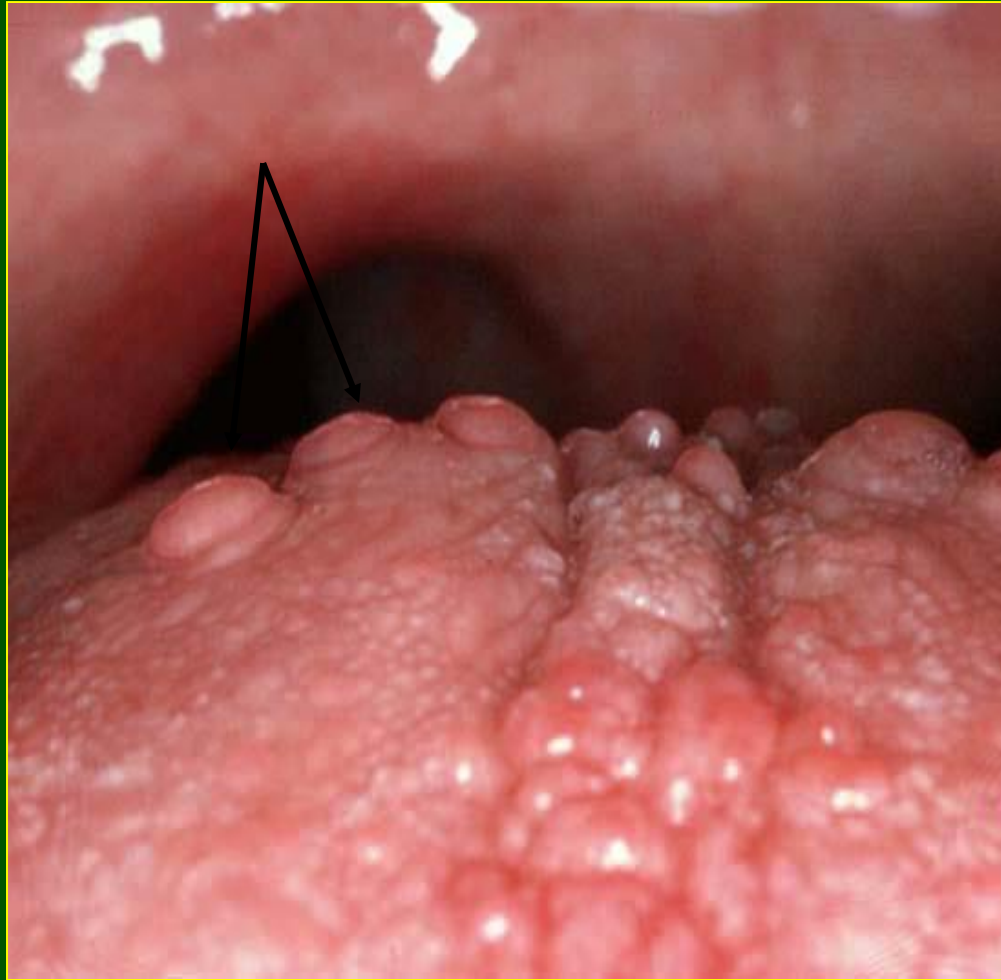
Lingua fissurata, geographica



Tonsilla linguae lateralis



Hyperplasia of papillae circumvallatae



Lichen oris



Ecchymosis



Praecancerous laesions

Homogenous leukoplakia

Erythroplakia

Cheilitis chronica actinica

Cheilitis glandularis

Cornu cutaneum



Praecancerous laesions

Homogenous leukoplakia

Erythroplakia

Cheilitis chronica actinica

Cheilitis glandularis

Cornu cutaneum

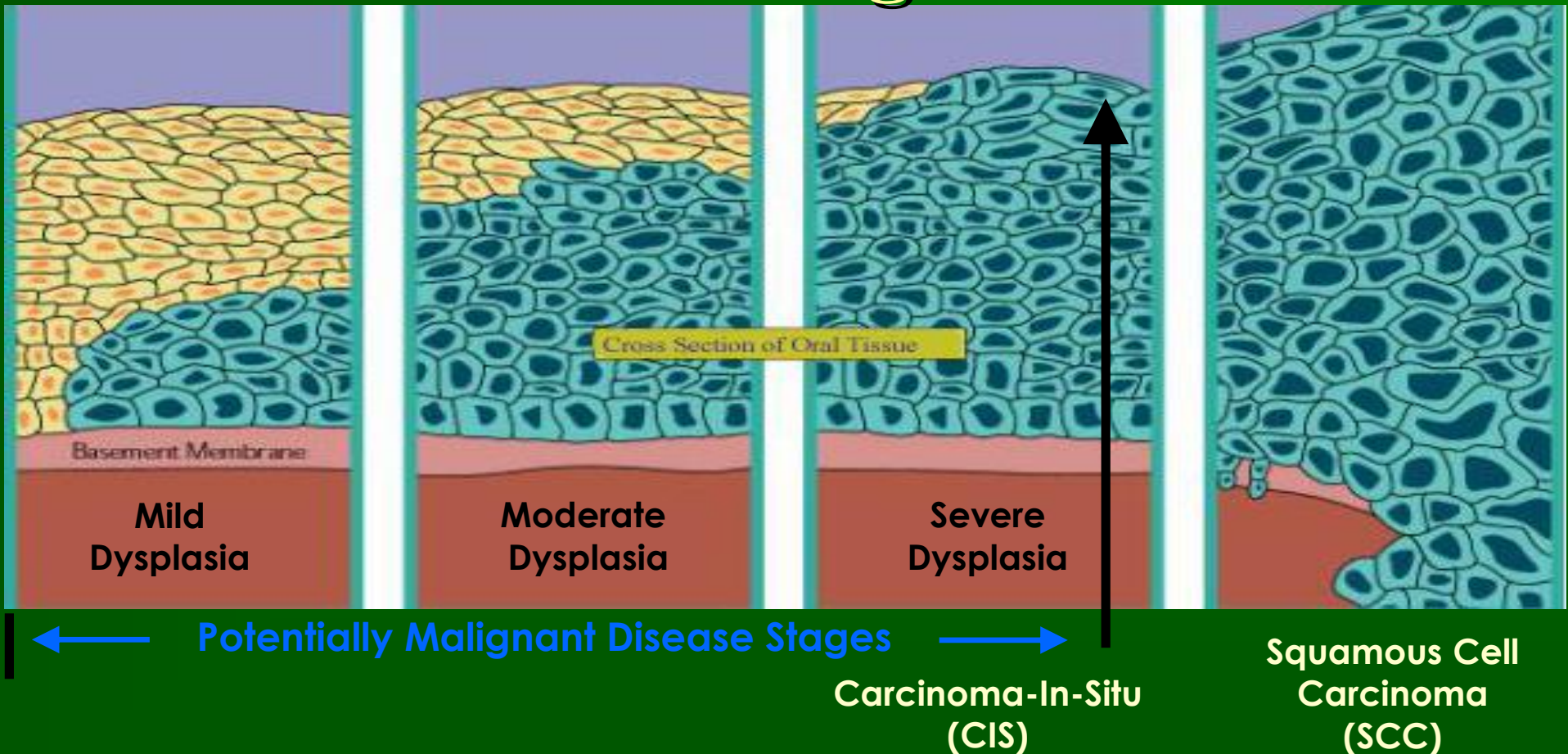


Erythroplakia



Oral Cancer & Dysplastic Progression

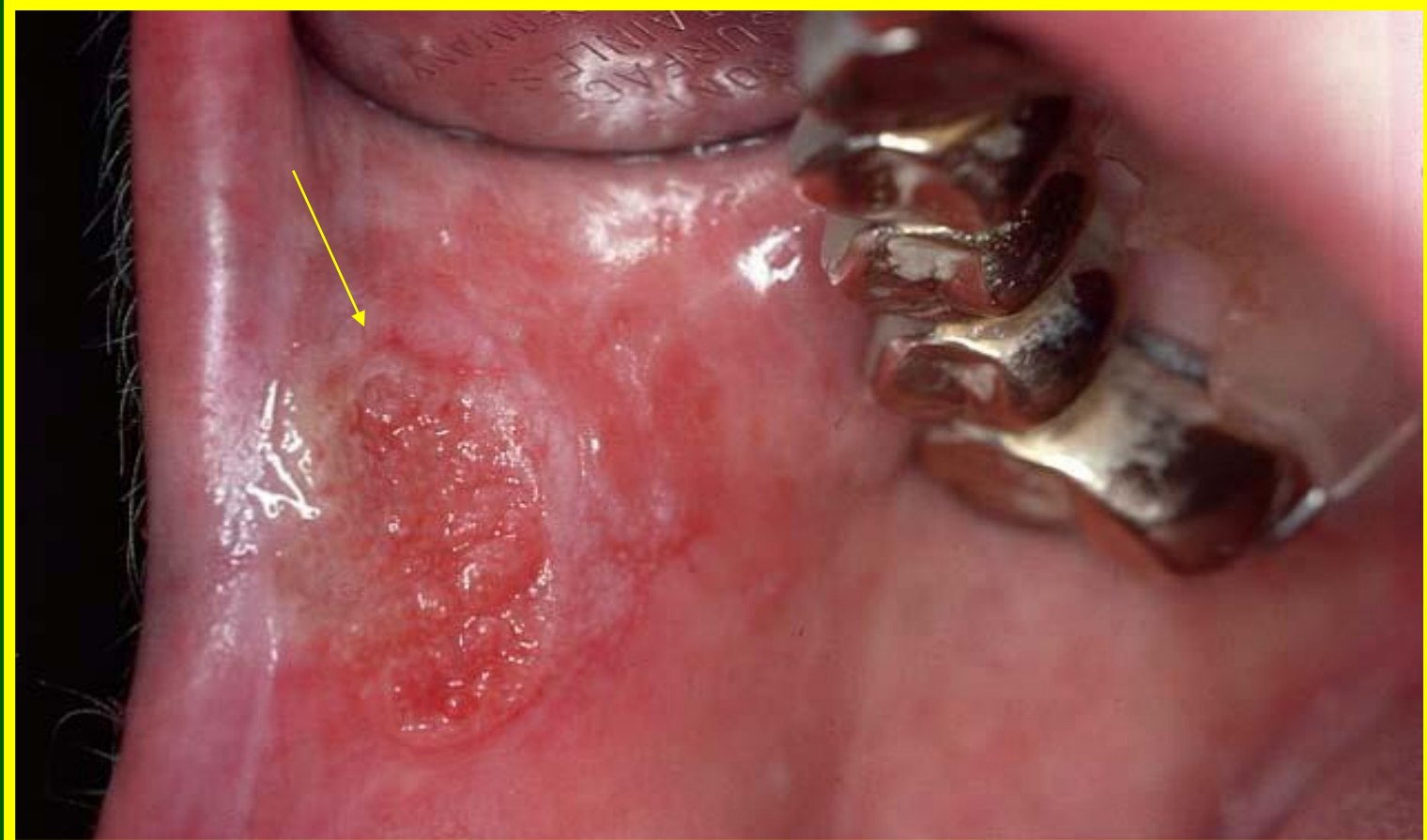
Ideal time for
Discovery & Intervention is
in the Premalignant stages



Lipoma



Early stage carcinoma



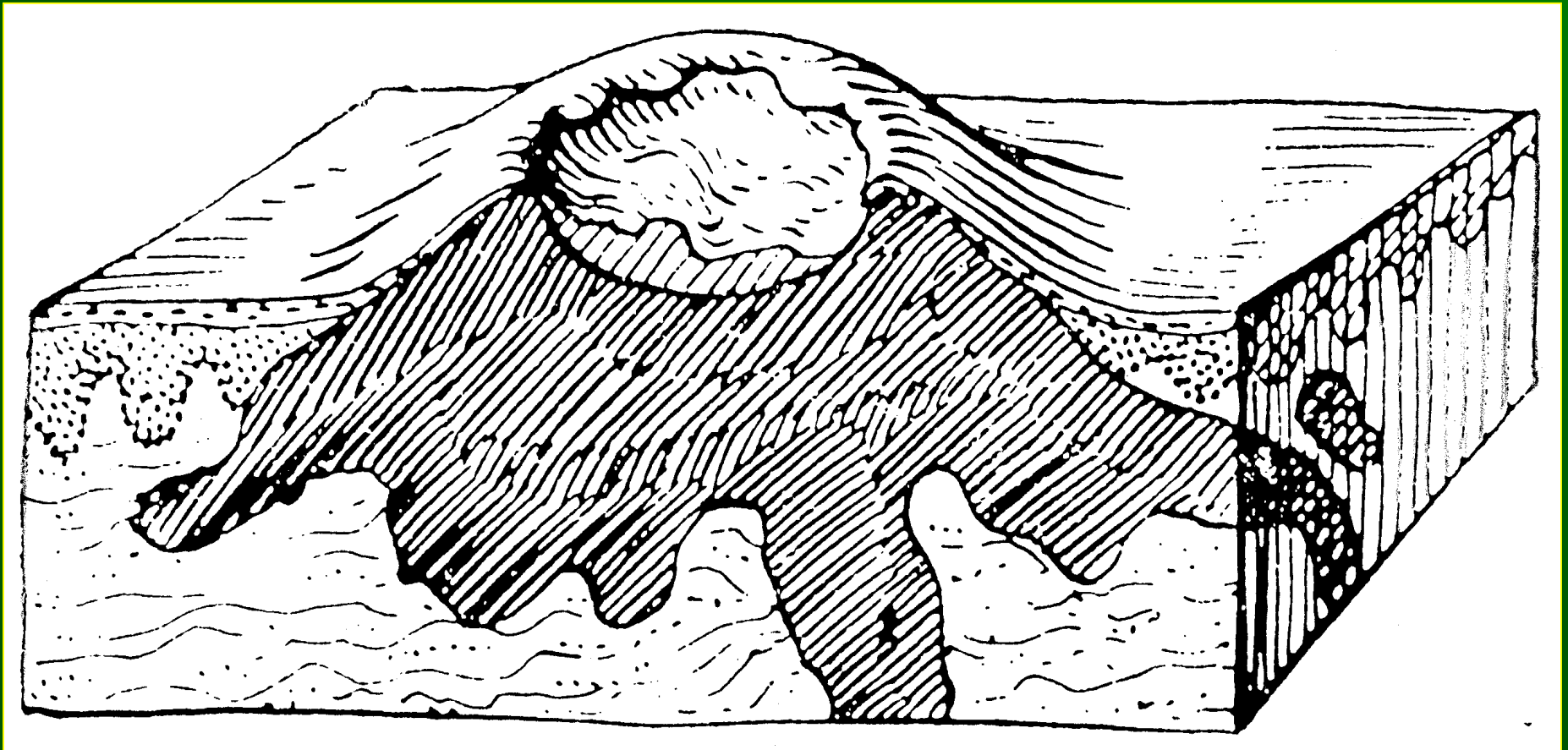
Early stage carcinoma



Cc. labii inf.

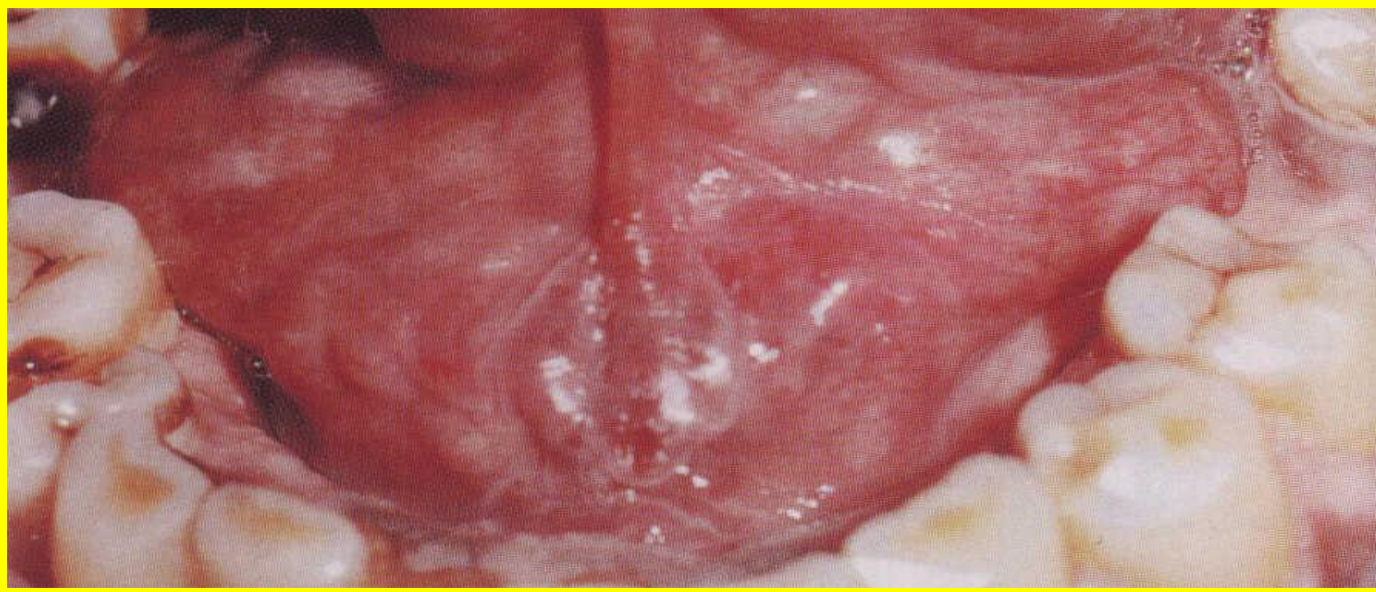


Carcinoma

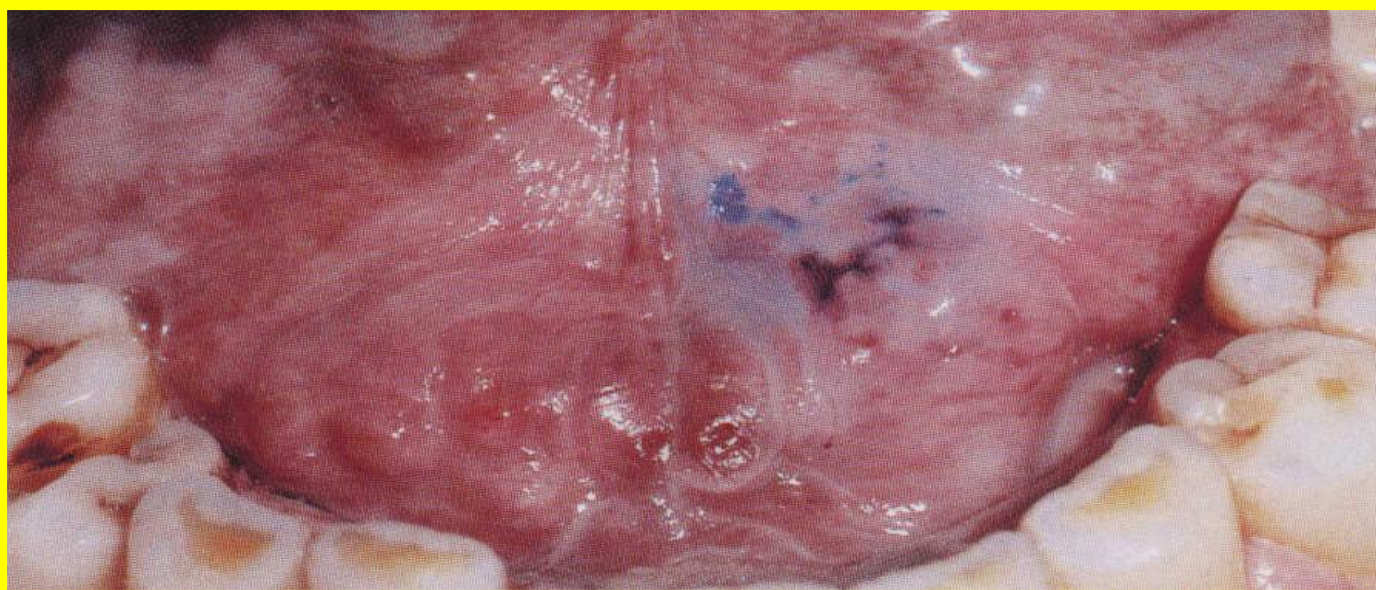


Carcinotic ulcer





**Oratest
(toluidin blue)**

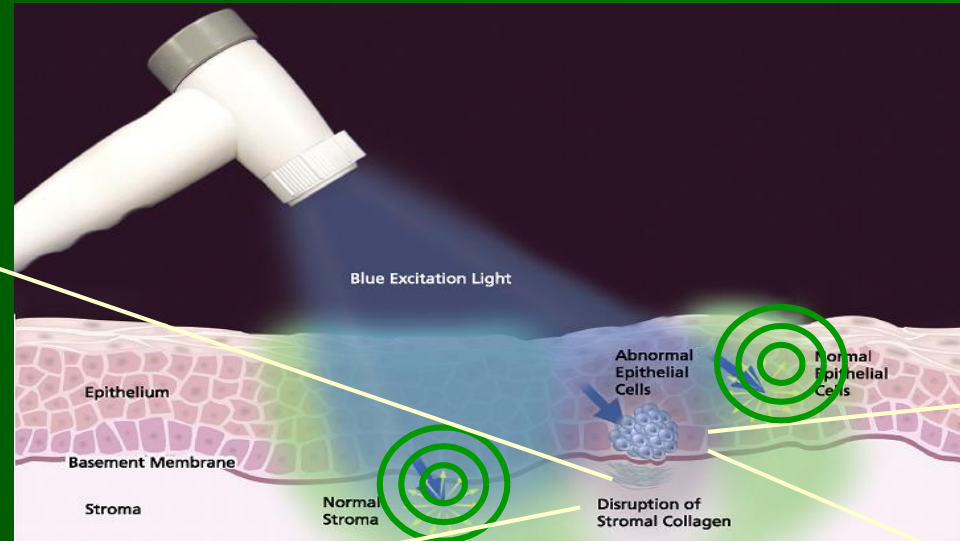


Brush biopsy-cytology



Tissue Fluorescence and Dysplastic Progression

Breakdown of Collagen
Matrix (prelude to
invasion)
Collagen cross-links ↓
Fluorescence ↓



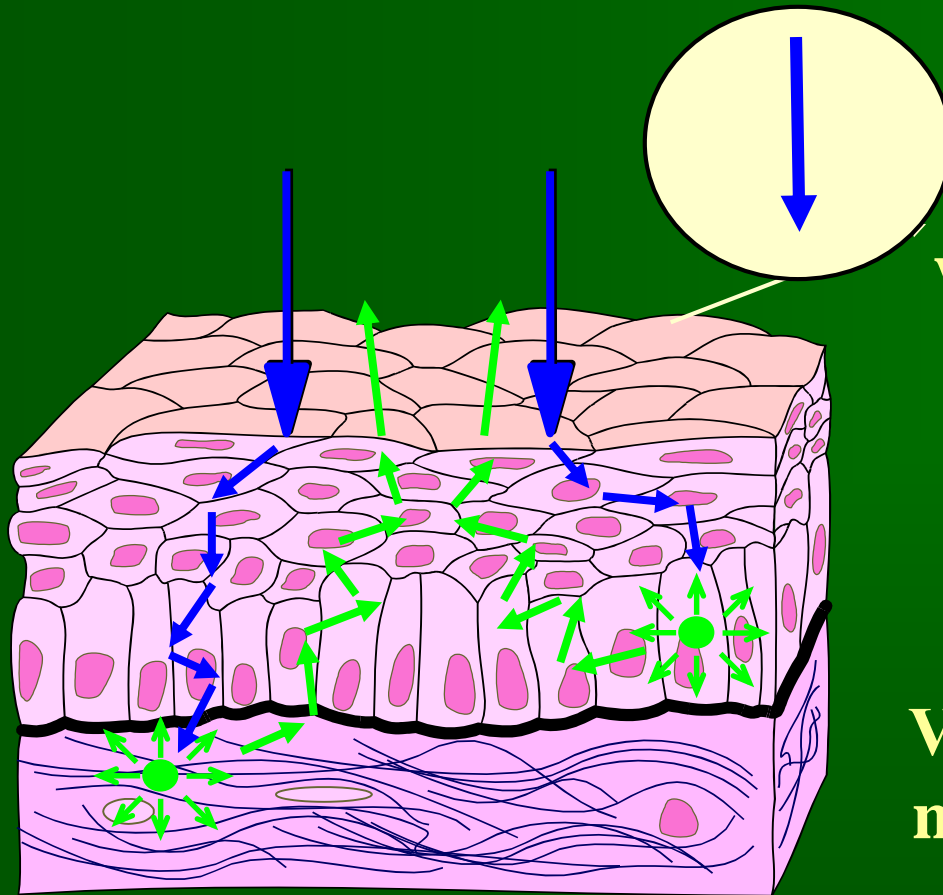
Metabolic Activity ↑
FAD ↓
Fluorescence ↓

Micro-Vascularization (recruitment
of new blood supply)
Blood absorption ↑
Fluorescence ↓

Nuclear back-scattering ↑
Fluorophores excited ↓
Fluorescence ↓

*Fluorescence intensity decreases with
dysplastic progression*

Fluorescence Visualization



Blue light excites natural fluorophores in both the epithelium and stroma which emit their own light, fluorescence, at longer wavelengths – green, yellow & red.

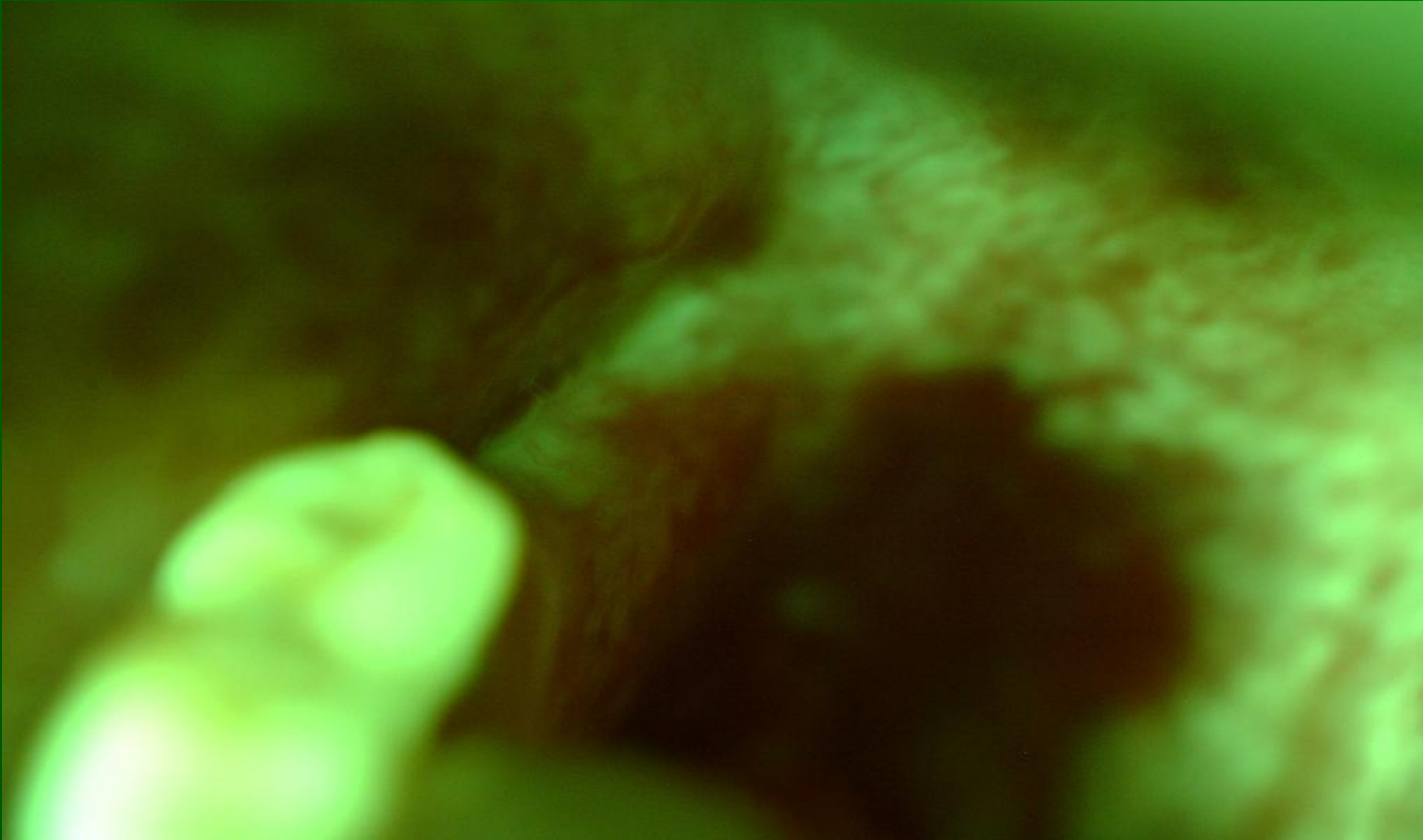
VELscope's proprietary filtering makes fluorescence visualization possible by blocking the blue reflectance and enhancing the fluorescence image

**Oral Mucosa looks predominantly green
under fluorescence visualization...**



Buccal Mucosa

A cancerous lesion looking dark compared to the adjacent normal tissue...







**SPEAK
OUT...**

...ABOUT MOUTH CANCER

FACT

Young, old, smokers and non-smokers, more than 6,500 people will be diagnosed with mouth cancer this year in the UK. Without early detection half will die.

CHECK

Self-examination is a simple, potentially life-saving process. Look out for ulcers which do not heal within three weeks, red and white patches in the mouth, and unusual lumps or swellings.

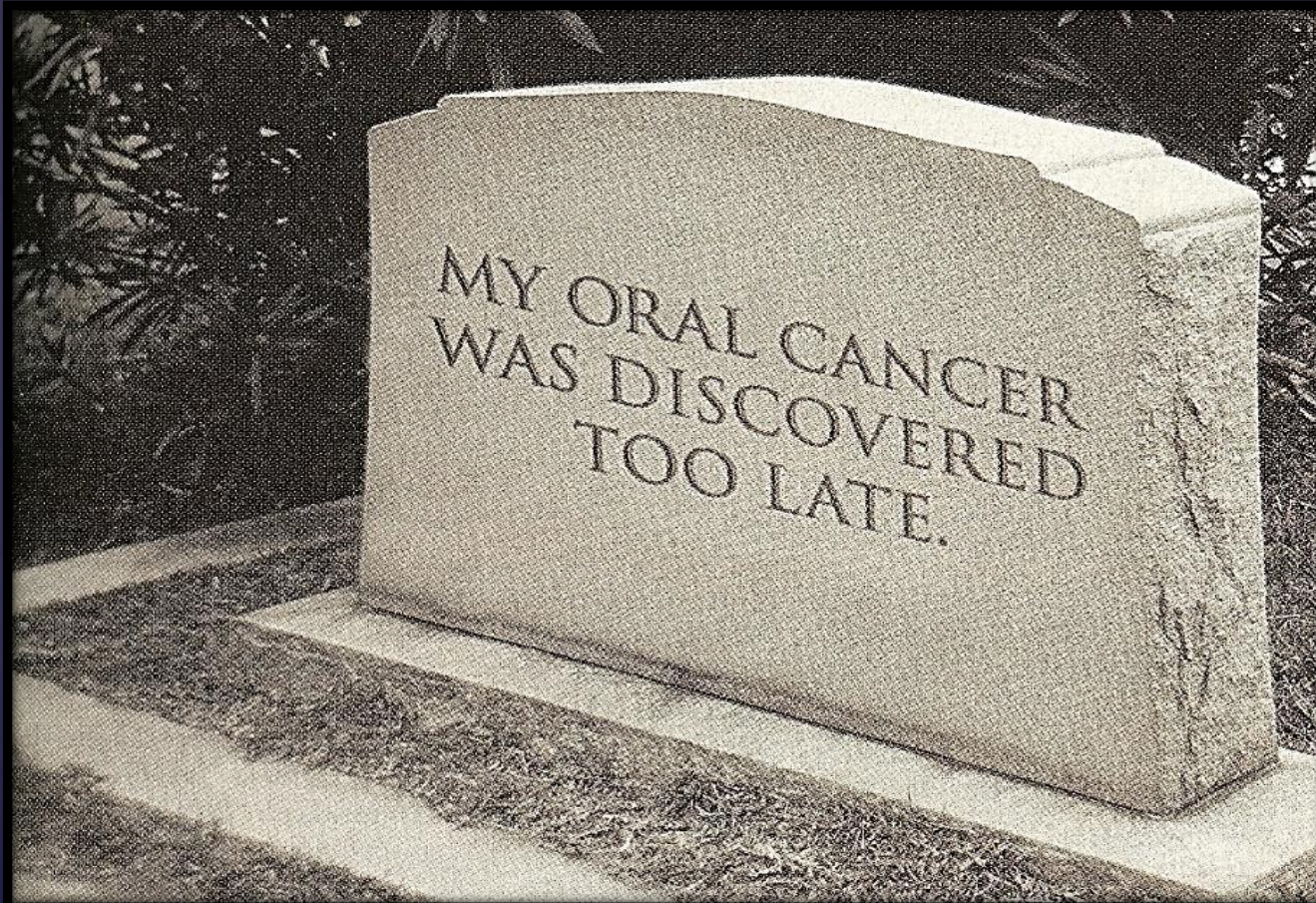
ACT

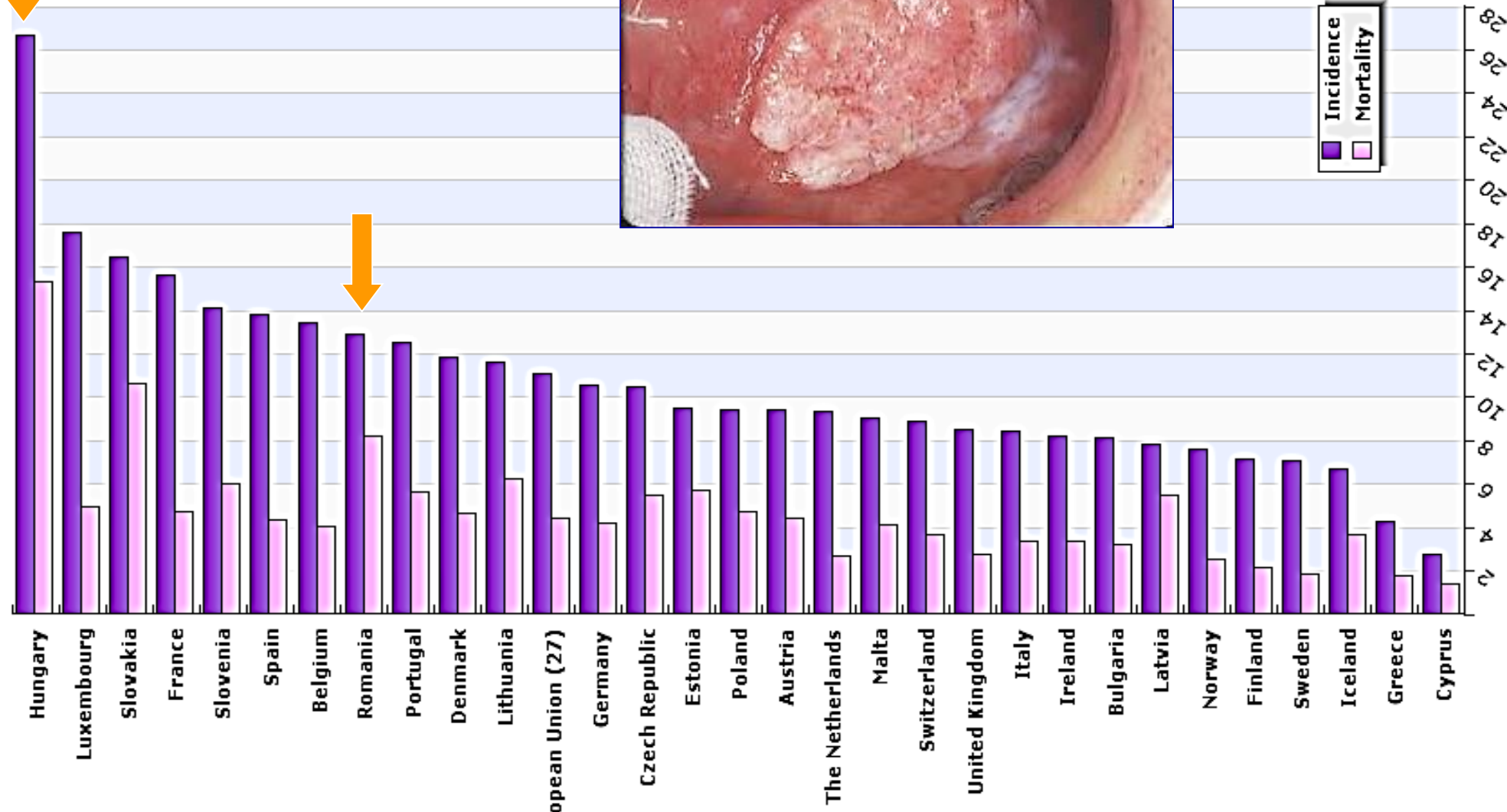
Know the risk factors and regularly visit your dentist to ensure you are checked for signs of mouth cancer.

Visit www.mouthcancer.org



*There are two cornerstones: **prevention**
and early diagnosis*

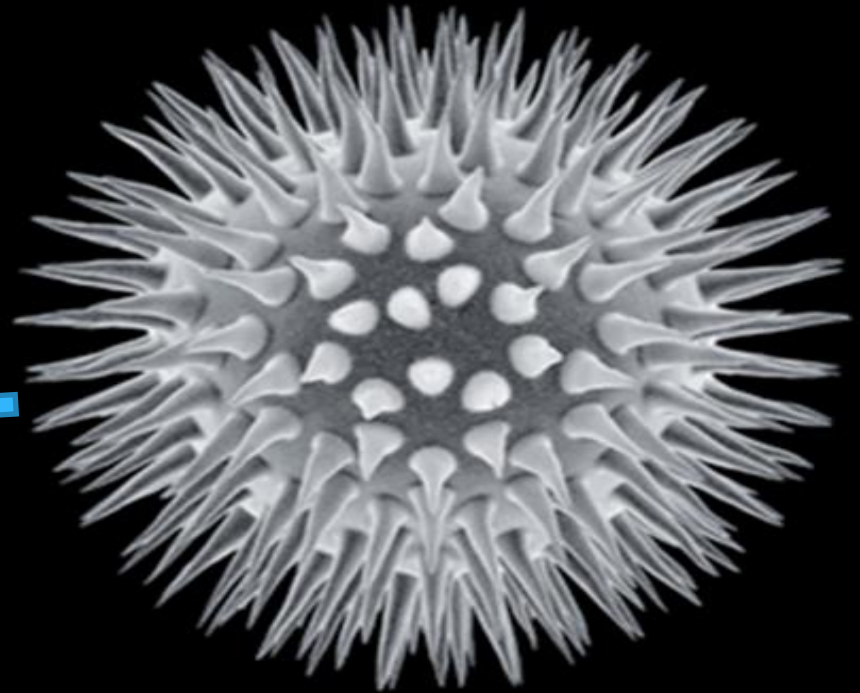




Mortality of oral cancer in Hungary 2000-2011

| Year | No. of death | Death/100000 |
|-------------|--------------|--------------|
| 2000 | 1688 | 16,8 |
| 2001 | 1737 | 17,1 |
| 2002 | 1717 | 16,9 |
| 2003 | 1760 | 17,4 |
| 2004 | 1690 | 16,7 |
| 2005 | 1567 | 15,5 |
| 2006 | 1585 | 15,7 |
| 2007 | 1581 | 15,7 |
| 2008 | 1651 | 16,4 |
| 2009 | 1521 | 15,2 |
| 2010 | 1524 | 15,2 |
| 2011 | 1494 | 15,0 |

p16+ zone
tonsil



HPV-16

One of the most common
sexually transmitted infections.
People are unaware that
they have it.



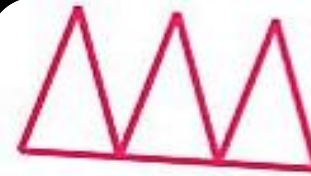
Condyloma accuminatum



Verruca vulgaris



Papilloma



Verruca

Upside down V



Condyloma

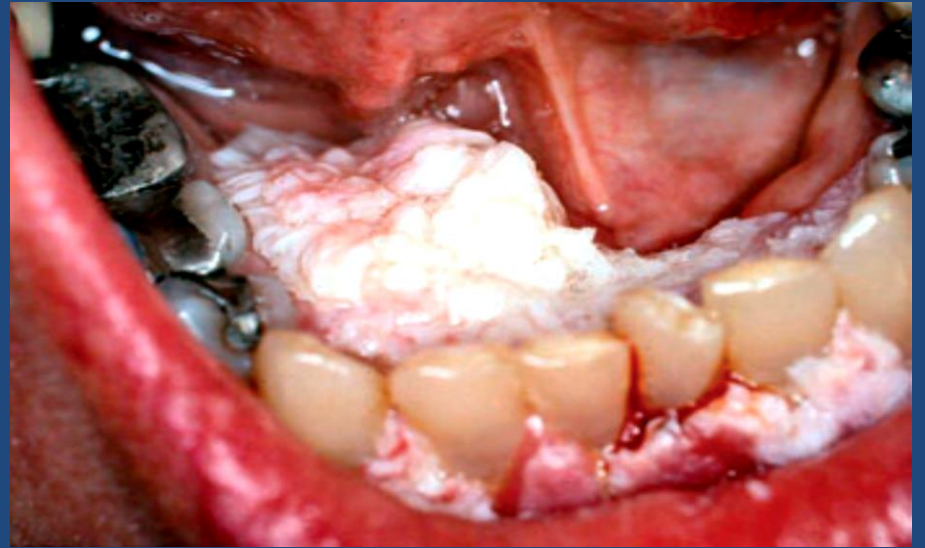
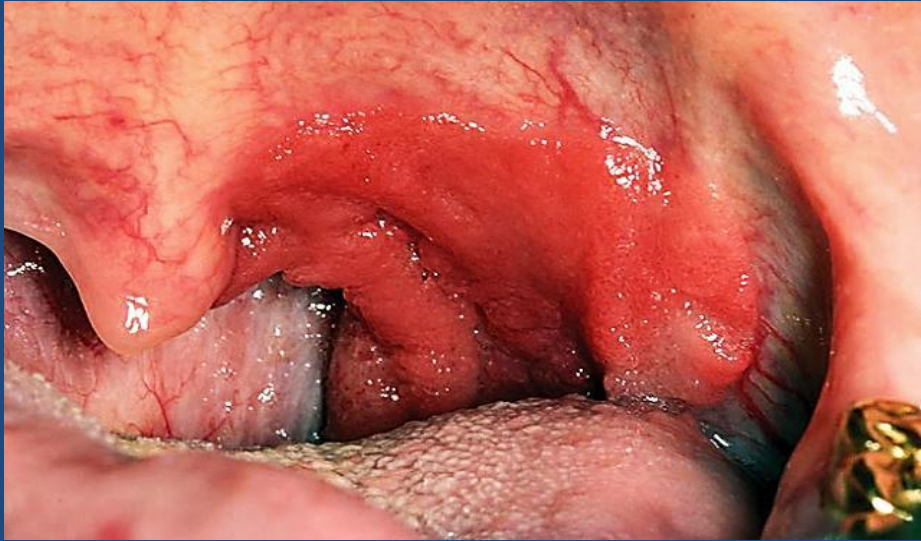
Sideways C



Papilloma

Pedunculated like P

Sara Gordon DDS MSc FRCD(C)





THANKS FOR YOUR ATTENTION !

Collecting Diagnostic Information



**Dental Diagnostic
Database**

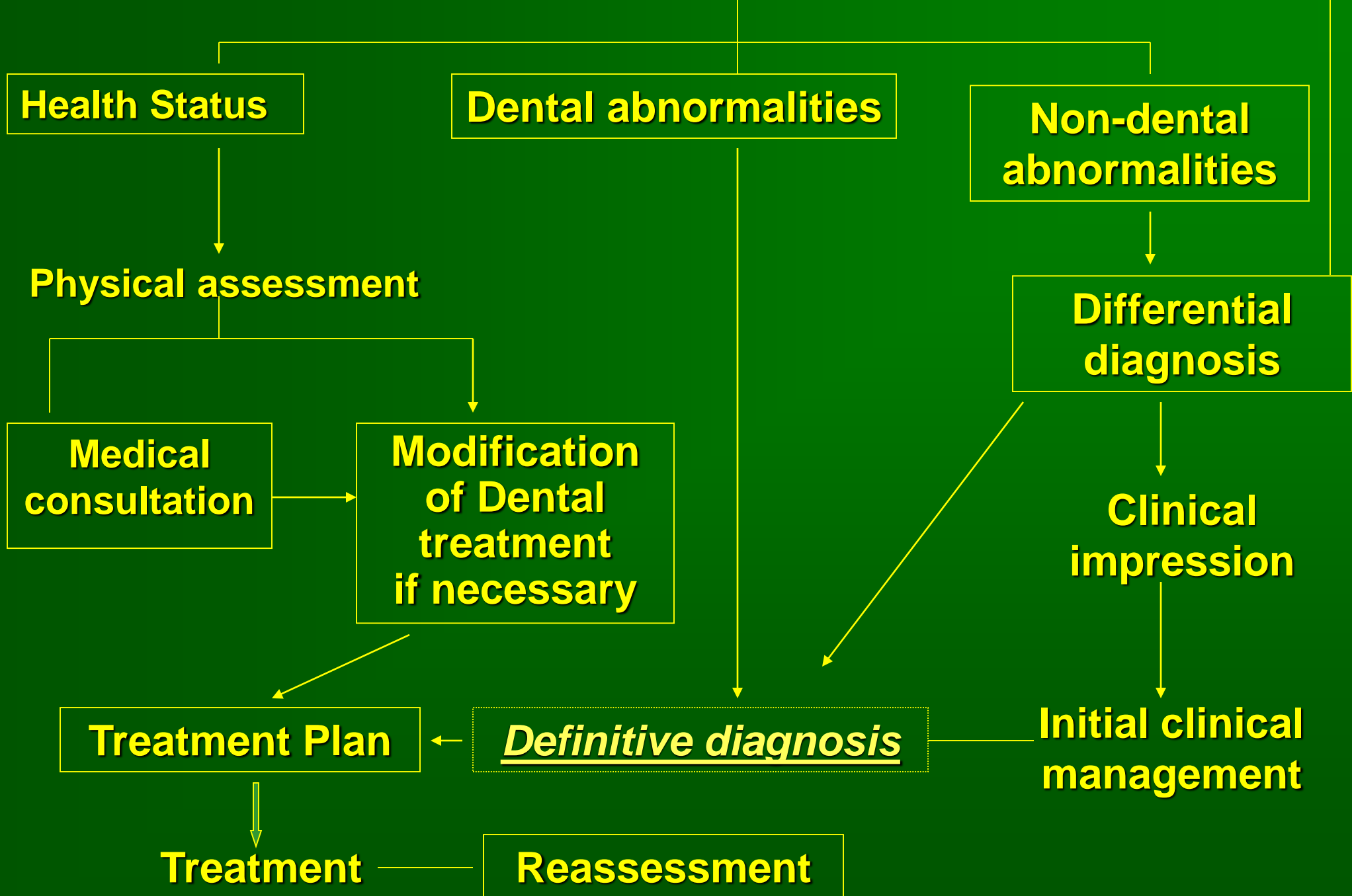


**Seek additional
information**



**Evaluation of diagnostic information
classification of abnormalities**





The health Questionnaire

Nonspecific questions about general health, specific questions concerning common diseases

advantages:

- saving time
- provides a documentation in the patient's handwriting

Disadvantages potential for errors and omissions

Common problems:

- omitting the clarification discussion
- obtained by an auxiliary person

CONFIDENTIAL – MEDICAL HISTORY

To be completed by patient (delete as appropriate)

FULL NAME

DATE OF BIRTH/...../..... OCCUPATION

WHO IS YOUR REGISTERED MEDICAL PRACTITIONER?

ADDRESS OF MEDICAL PRACTITIONER.....

.....

- | | | |
|--|-----|----|
| 1. Have you ever had Rheumatic Fever? | Yes | No |
| 2. Do you have Heart Trouble or High Blood Pressure? | Yes | No |
| 3. Do you have Chest Trouble? | Yes | No |
| 4. Have you had Jaundice or Hepatitis, or been refused as a blood donor? | Yes | No |
| 5. Have you ever had severe bleeding that needed special treatment after an injury or dental extraction? | Yes | No |
| 6. Is there any family history of Bleeding Disorders? | Yes | No |
| 7. Are you taking any Drugs, Tablets, or Medicines? | Yes | No |
| If 'Yes' please list | | |
| 8. Do you suffer from any Allergies (e.g. Penicillin)? | Yes | No |
| If 'Yes' please list | | |
| 9. Are you Diabetic? | Yes | No |
| 10. Do you have any history of Epilepsy? | Yes | No |
| 11. Have you had any a) Serious Illnesses or Operations? | Yes | No |
| or b) Adverse reactions to Local or General Anaesthesia? | Yes | No |
| 12. Have you come into contact with anybody who has AIDS or is HIV positive? | Yes | No |
| 13. (Females only) Are you pregnant? | Yes | No |

Please add **anything** else you feel might be of importance:

DATE CHECKED

Táplálkozás

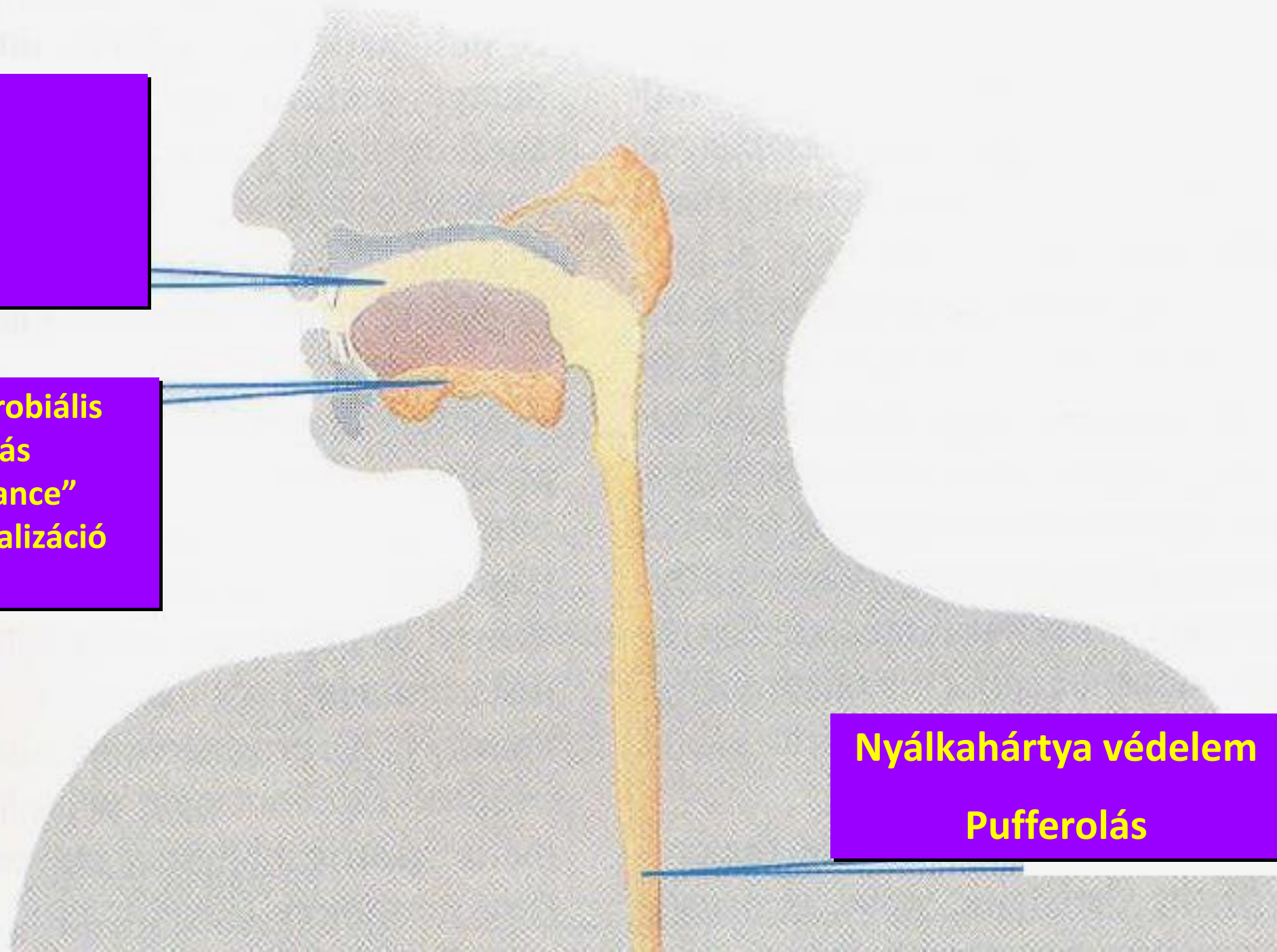
Beszéd

Lubrikáció

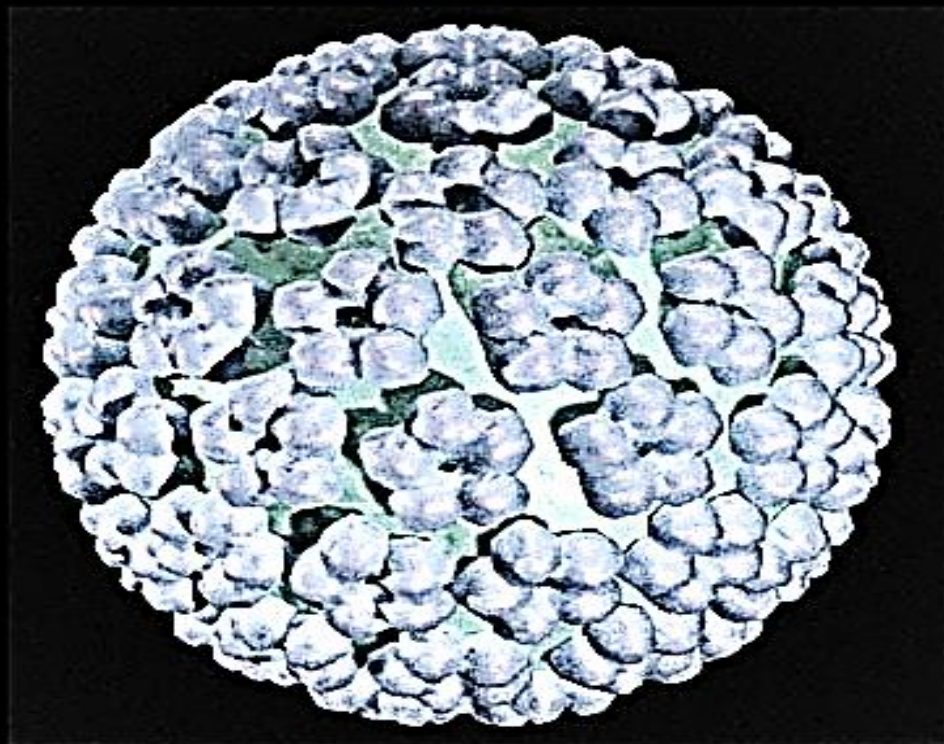
**Antimikrobiális
Hatás
„Clearance”
Remineralizáció**

Nyálkahártya védelem

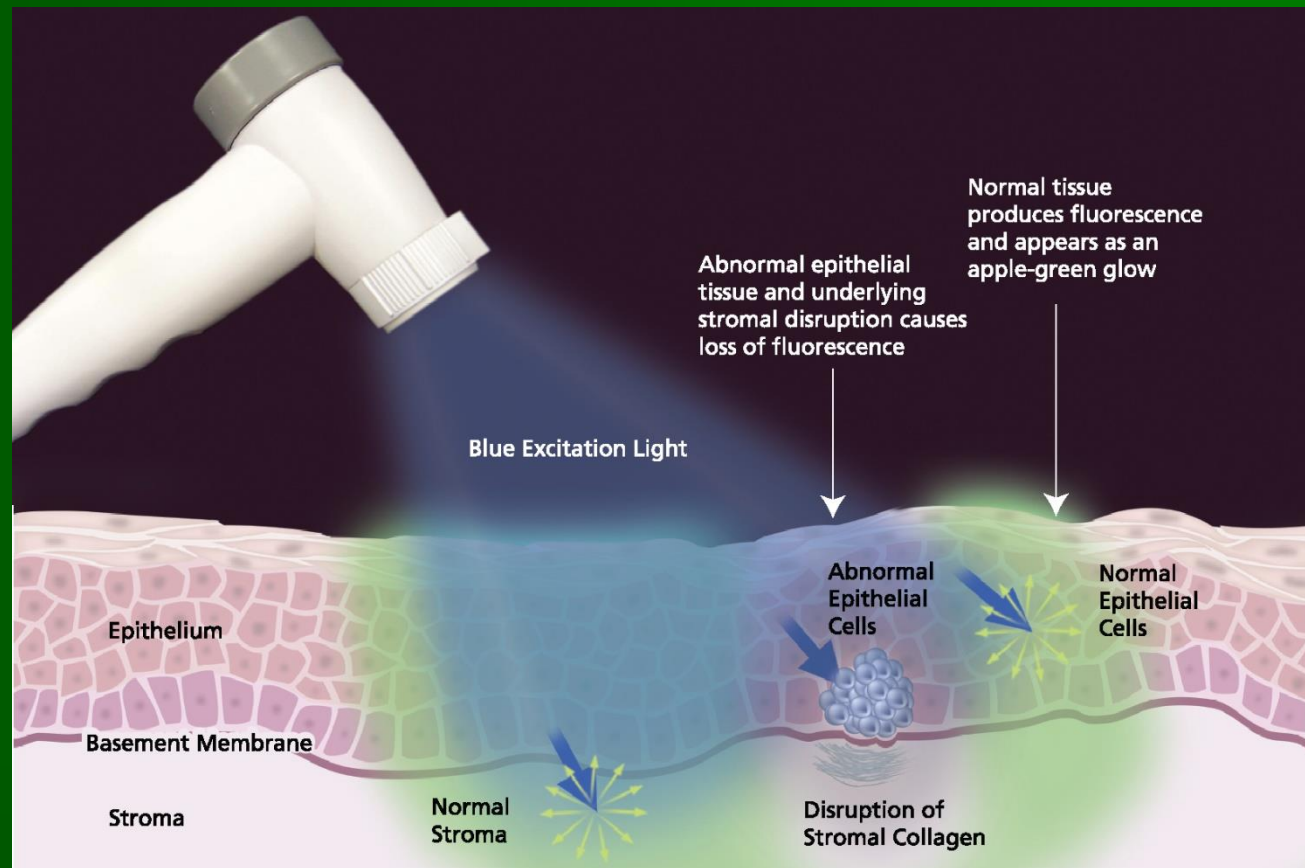
Pufferolás



Human Papilloma Virus



The Game Changer



GASTROESOPHAGEAL REFLUX

