

**THE ROLE OF DENTAL  
PROFESSION  
IN  
DETECTION  
AND  
PREVENTION OF ORAL  
CANCER**

Total prevention of cancer is nearly impossible up till now.

It can be prevented from causing rapid destruction of tissues and death to the patient by *early detection and treatment*

It is estimated that 80% of the deaths from oral cancer could be prevented by early detection and prompt adequate therapy.

On suspecting a neoplasm rapid consultation may save the life.

*Oral ulcers* of unclear cause and not responding to indicated treatment should not be neglected for long time.

The dentist can apply simple diagnostic test to suspected lesions as:

**1-Oral cytology or oral exfoliative cvtology**

**2- Toluidine blue test**

## A-Oral cytology or oral exfoliative cytology

It is the study of normal and abnormal desquamated cells of the oral cavity.

Cells may be *scrapped* from surfaces or *aspirated* from natural fluid and examined after special staining.

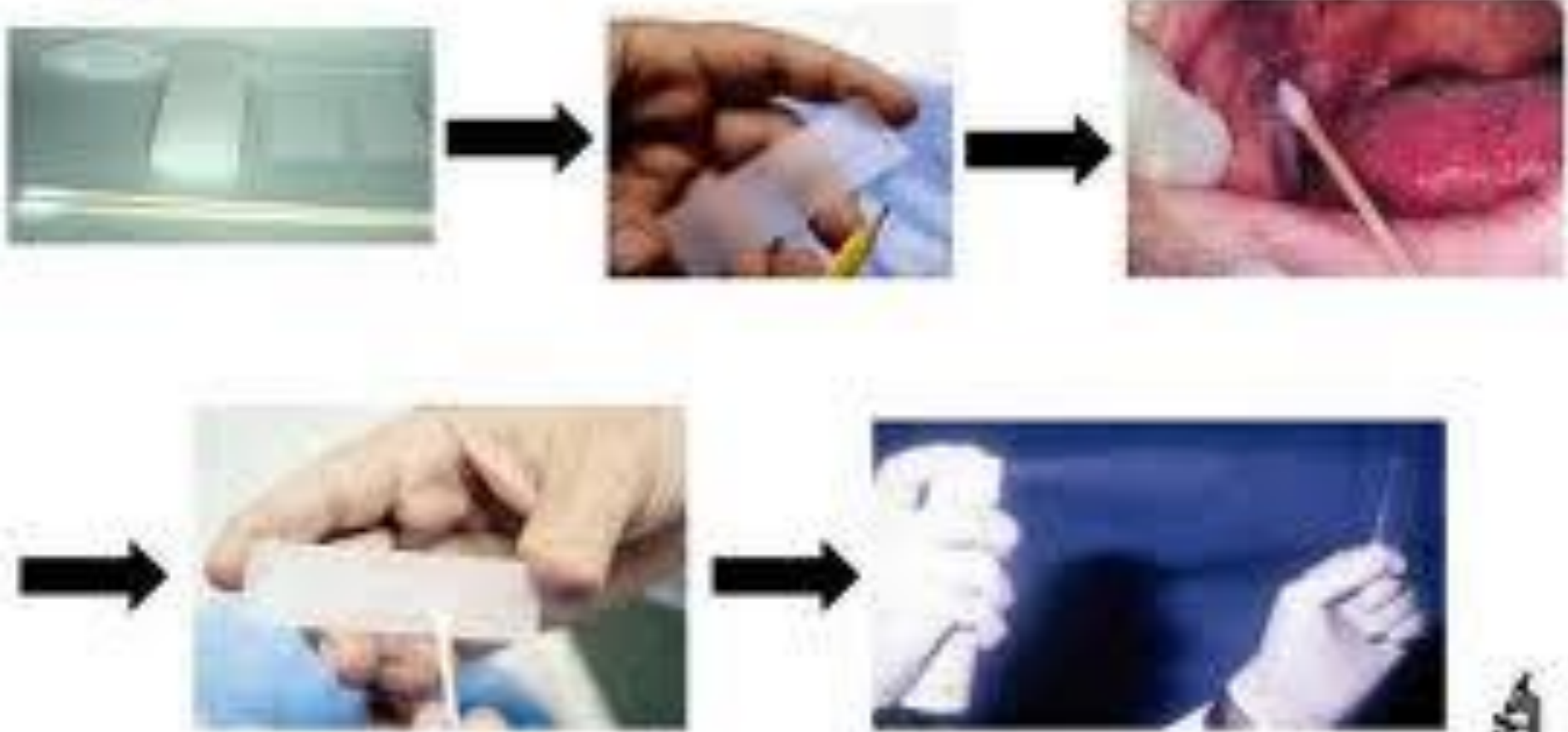


The image features a collection of dental instruments against a dark green background. From left to right, there is a wooden instrument with a rounded top, a metal instrument with a textured surface and a pointed tip, a grey brush-like instrument, and a metal instrument with a flat, angled tip. The text 'Springer Images' is overlaid in the center, with 'Springer' in orange and 'Images' in green, both in a bold, sans-serif font with a slight shadow effect.

**Springer Images**



# Exfoliative Cytology







① 조직에서 필요한 세포를 채취



# B-Toluidine blue test:

**Toluidine blue**, an acidophilic metachromatic nuclear stain which has an affinity for areas of carcinoma in situ and invasive carcinoma but not for normal mucosa.



## **Technique:**

1. The patient is instructed to rinse with water. Excess saliva is removed.
2. A mucolytic agent (1% acetic acid) is applied to the mucosa with a cotton applicator.
4. Toluidine blue( 1%) is then applied with a cotton applicator. The dye should cover the entire lesion and a clinically normal margins.

- 4- Excess toluidine blue is removed by rinsing with water.
- 5- Lesions which retain the dye stain blue and are classified as positive. Negative lesions do not retain the dye.
- 6- Lesions which retain the stain should be biopsied. Negative lesions should be followed clinically and re-staining.