

# ULCERS OF THE MOUTH

## THESIS

SUBMITTED IN PARTIAL FULFILMENT

OF THE REQUIREMENTS

FOR THE DEGREE OF

( M.S. ) In ( E.N.T )

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1984

### ACKNOWLEDGEMENT

*I wish to express my sincere gratitude to Prof. Dr. Mamdouh El-Gohary, Professor of Oto-Rhino-Laryngology, Faculty of Medicine, Ain Shams University, for his constant encouragement, guidance, helpful supervision, precious ideas, his constructive suggestions and support.*

*I would like to express my special thanks to General Dr. R. Nassar, Professor of E.N.T., Military Medical Academy, for his sincere help, generous suggestions and constant guidance.*

*I am also deeply indebted to Colonel Dr. F. Khamies, Consultant of Dermatology and Venereology, for his kind supervision, great help and assistance.*

*Lastly, I am very grateful to all those who have contributed to make this thesis come to light in its final form.*



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## I N T R O D U C T I O N

## INTRODUCTION

In addition to some local diseases that may cause ulcers in the mouth, there are many systemic diseases which may be associated with oral ulceration and this may be the presenting symptom of the underlying disease.

Although many of these ulcers appear similar, careful history and good clinical examination usually lead to the most probable diagnosis.

However, in some cases the clinical diagnosis is impossible and we have to resort to laboratory work. In this condition histological, bacteriological, serological or haematological investigations become obligatory.

## AIM OF THE ESSAY

The objective of this essay is to review the literature dealing with the various causes of ulceration of the mouth cavity with the purpose of better understanding, earlier diagnosis and ideal management of such ulcers.

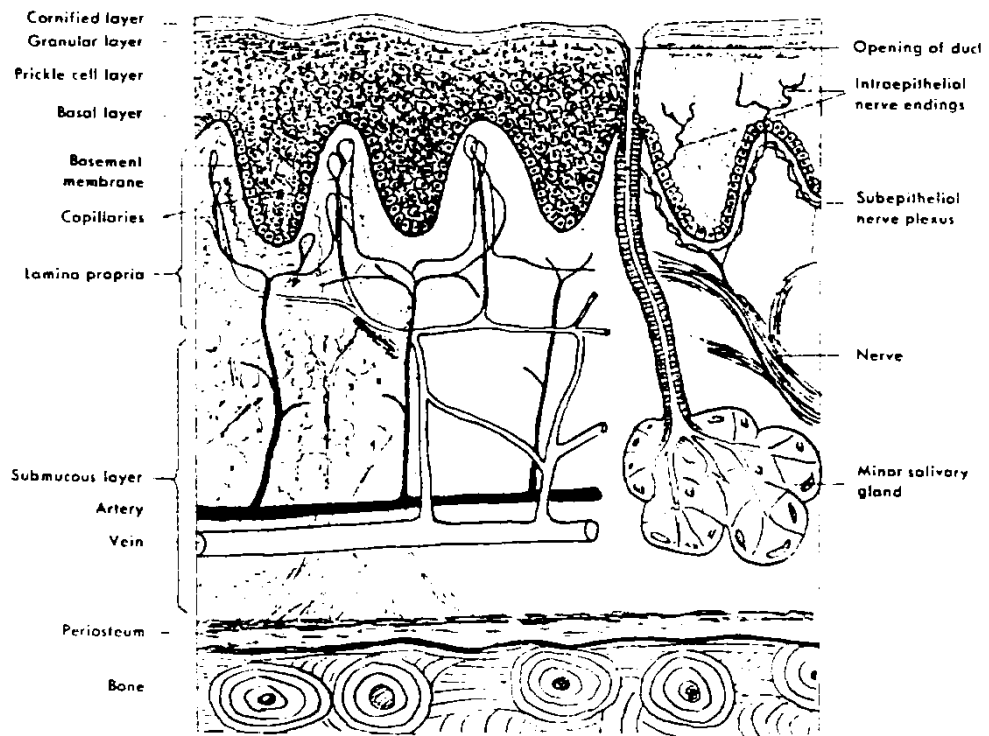


Fig. (1): After Orban's oral histology.



The connective tissue of the oral mucous membrane or lamina propria is of variable thickness and supports the epithelium. Papillae of connective tissue protrude toward the epithelium and they carry blood vessels and nerves. Epithelial ridges protrude also toward the lamina propria. A basement membrane is present within this connective tissue subjacent to the basal cells of the epithelial layer (Orban, 1980).

The submucosa consists of connective tissue and attaches the mucous membrane to the underlying structures. Glands, blood vessels, nerves and adipose tissue are present in this layer.

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## CLASSIFICATION

### CLASSIFICATION

#### I- Local causes of oral ulceration:

1. Traumatic ulcers.
2. Inflammatory ulcers:
  - a- Vincent's ulcer.
  - b- Cancrum oris.
3. Malignant ulcer.
4. Recurrent aphthous ulceration.

#### II- Systemic diseases associated with oral ulceration:

##### A- Medical diseases:

##### 1- Fevers as:

- a- Diphtheria.
- b- Measles.
- c- Scarlet fever.

##### 2- Infectious diseases:

##### a- Bacterial infections:

- i- Syphilis.
- ii- Tuberculosis.
- iii- Leprosy.

##### b- Viral infections:

- i- Herpes simplex.
- ii- Herpes zoster.
- iii- Herpangina.
- iv- Hand-food and mouth disease.

- c- Fungal infections as:
  - i- Histoplasmosis.
  - ii- Sporotrichosis.
- d- Candidiasis.
- 3- Systemic connective tissue diseases as:
  - a- Systemic lupus erythematosus.
  - b- Wegener's granulomatosis.
- 4- Deficiency diseases:
  - a- Nicotinic acid deficiency.
  - b- Vitamin C deficiency.
- 5- Endocrinal diseases as diabetes mellitus.
- 6- Haematological diseases:
  - a- Infectious mononucleosis.
  - b- Aplastic anaemia.
  - c- Agranulocytosis.
  - d- Cyclic neutropenia.
  - e- Macroglobulinaemia.
  - f- Leukaemia.
- B- Dermatological diseases:
  - 1- Lichen planus.
  - 2- Pemphigus and Pemphigoid.
  - 3- Erythema multiforme.
  - 4- Behcet's disease.
  - 5- Reiter's disease.
- C- Stomatitis due to allergy, metals and drugs.

### TRAUMATIC ULCERS

The aetiology of this common type of oral ulceration may be mechanical, chemical, thermal or physical.

Oral ulceration may occur in nervous individuals due to the habit of cheek biting. Also the sharp edges of a broken tooth may cause injury to the tongue or buccal mucosa. Ill-fitting dentures may lead to chronic mucosal damage causing prosthetic ulcer. Excessive brushing of the teeth or the use of very stiff bristles on a tooth-brush may also cause injury to the gums or buccal mucosa. Burns from ingestion of hot foods or drinks may occur but usually they are mild lesions. Also oral ulceration may follow accidental ingestion of certain chemicals as caustic soda. Radiotherapy produces inflammation of the mucosa and the tongue becomes smooth with atrophy of the papillae. When the salivary glands are affected the mouth becomes dry and xerostomia causes painful fissuring and ulceration of the oral mucosa (Downton, 1979).

The edge of the traumatic ulcer is erythematous, the base is not indurated unless in chronic cases and the margins show no infiltration.

Healing of traumatic ulcer is usually rapid and in healthy persons no treatment is required (Bailey and

Love's, 1980). In some cases local application of an antibiotic with hydrocortisone may be done to protect against infection and arrest the inflammatory reactions. Occasionally, ulcers may persist for a long period especially those of the tongue and in this case repeated biopsies are important for fear of malignancy (Keyes, 1980).

### VINCENT'S ANGINA

This disease is more common among weak debilitated persons and in bad unhealthy conditions. It was common during both World Wars.

#### Aetiology:

The disease is caused by two gram-negative organisms, the fusiform bacillus and the spirochaete *Borrelia Vincenti* which is anaerobic actively motile organism with three to five loose spirals. Both organisms are present in normal mouths and the disease is not communicable (Bailey and Love's, 1980), but it is more liable to occur in cases with mal-nutrition or leukaemia.

Vincent's angina is more common in young adults with bad oral hygiene, dental caries or ill-fitting dentures.

#### Clinical picture:

The condition begins gradually with moderate increase of temperature, malaise and slight pain in the throat, but in some cases the pain may be severe. The breath is characteristically foetid and the cervical lymph nodes on the affected side are enlarged and tender.

The ulceration process commonly affects the tonsils and fauces, but ulceration may be found in the inner