

**STUDY GUIDE**

<b>PROGRAM</b>	<b>BDS</b>
<b>COURSE TITLE</b>	<b>ORAL PATHOLOGY</b>
<b>ACADEMIC YEAR</b>	<b>3<sup>rd</sup> Year</b>
<b>INTRODUCTION</b>	<p>“According to the American Dental Association: “<i>Oral pathology is the specialty of dentistry and discipline of pathology that deals with the nature, identification, and management of diseases affecting the oral and maxillofacial regions.</i>” In other words, oral pathology is the science that understands the causes and effects of these diseases. Common practices include clinical examinations, lab testing, and taking the whole body health and chemistry into consideration. *”</p> <p>Oral Pathology is important because it provides the dental clinician with the underlying basis of the condition so as to develop a focused management plan.</p>
<b>RATIONALE</b>	This course will provide the students the basic understanding of pathologies of the orofacial region and enhance their clinical diagnostic skill based on the pathological information.
<b>OUTCOMES</b>	By the end of the course, students will be able to diagnose common dental conditions based on pathological information
<b>DEPARTMENT INVOLVED</b>	Oral Pathology
<b>COURSE OBJECTIVES</b>	<p>By the end of the course, the students will be able to:</p> <p><u>DISTURBANCES IN NUMBER AND SIZE OF TEETH</u></p> <ul style="list-style-type: none"> <li>• Discuss the clinical, radiographic features and syndromes associated with Anodontia,Hyperdontia, Hypodontia, Macrodonia and Microdonia</li> </ul> <p><u>DISTURBANCES IN FORM OF TEETH</u></p> <ul style="list-style-type: none"> <li>• Define Geminatio, Fusio, Concrescence, Dens invaginatus, Dens evaginatus, Enamel pearls, Taurodontism, Dilaceratio, Supernumerary roots</li> </ul> <p><u>DISTURBANCES IN STRUCTURE OF TEETH</u></p>

- Discuss the etiology, types and clinical, radiological and histological features of Amelogenesis Imperfecta, Dentinogenesis Imperfecta, Dentine dysplasia, Hypercementosis, Pulp calcifications and Internal and external resorptions

#### DISCOLORATION OF TEETH

- Explain the etiology and clinical features of exogenous and endogenous discolorations of teeth.

#### NON BACTERIAL LOSS OF TOOTH SUBSTANCES

- Discuss the etiological and clinical features of Attrition, Abrasion and Erosion
- Discuss the clinical and histological features of internal and external resorption.

#### DISORDERS OF ERUPTION AND SHEDDING OF TEETH

- Describe the Premature eruption, Premature loss, Retarded eruption, Persistence of deciduous teeth and Impaction of teeth

#### DENTAL CARIES

- Discuss the role of dental plaque, microorganisms, carbohydrates and other variables in the development of dental caries.
- Classify dental caries on the basis of site and rate of attack
- Describe the course and histopathogenesis of dental caries

#### PULPITIS

- Describe etiology of pulpitis.
- Classify different types of pulpitis on the basis of clinical, histological and radiographic findings.
- Discuss Chronic hyperplastic pulpitis, Pulp Calcification and Pulp Necrosis

#### SPREAD OF INFECTIONS

- Discuss the spread of infection, pathogenesis, and clinical, histopathological and radiographic features of the following disorders/conditions:
  - Acute and chronic periapical periodontitis

- Periapical abscess
- Periapical granuloma
- Periapical cyst
- Osteomyelitis
- Cellulitis and Ludwig's angina

#### CYSTS OF THE JAWS

- Classify Odontogenic and non-odontogenic cysts of the jaws.
- Describe the origin of odontogenic and non-odontogenic cyst of the jaws.

#### ODONTOGENIC CYSTS

- Compare the clinical, radiographic and histological features, and pathogenesis of the following odontogenic cysts:
  - Periapical (radicular)
  - Dentigerous and eruption
  - Odontogenic keratocyst;
  - Gingival
  - Lateral periodontal
  - Calcifying odontogenic
  - Glandular odontogenic

#### NON ODONTOGENIC CYSTS

- Compare the clinical, radiographic and histological features, and pathogenesis of the following non-odontogenic cysts:
  - Nasopalatine
  - Nasolabial
  - Median
  - Globulomaxillary

#### NON EPITHELIAL/PSEUDOCYSTS

- Discuss the clinical, radiographic and histological features of Traumatic bone cyst, Stafne's bone cavity and Aneurysmal bone cyst

#### ODONTOMES,ODONTOGENIC AND NON-ODONTOGENIC TUMORS

- Classify odontomes and odontogenic tumors.
- Describe the etiology, pathogenesis, clinical, histological and radiographic features of the following odontogenic tumors:
  - Ameloblastoma
  - Squamous odontogenic tumors
  - Calcifying epithelial odontogenic tumor
  - Adenomatoid odontogenic tumor
  - Ameloblastic fibroma
  - Ameloblastic fibro odontome
  - Odontoma
  - Odontogenic fibroma;
  - Odontogenic myxoma;
  - Cementoblastoma

#### BACTERIAL INFECTIONS

- Describe the etiology, clinical and histopathological features of following bacterial infections:
  - Necrotizing ulcerative gingivitis
  - Acute Necrotizing Ulcerative Gingivitis
  - Noma
  - Actinomycosis
  - Syphilis
  - Leprosy
  - Tuberculosis
  - Gonorrhoea

#### VIRAL INFECTIONS

- Describe the etiology, clinical and histopathological features of following Viral infections:
  - Herpetic stomatitis
  - Chickenpox and Herpes Zoster
  - Herpangina
  - Hand, foot and mouth disease

- Infectious mononucleosis
- Measles
- Cytomegalovirus

#### FUNGAL INFECTIONS

- Classify fungal infections
- Describe the etiology, clinical and histopathological features of following fungal infections:
  - Candida species and opportunistic infections
  - Pseudomembranous candidosis
  - Erythematous candidosis
  - Chronic hyperplastic candidosis
  - Candida-associated denture stomatitis
  - Candida- associated and other forms of angular cheilitis
  - Median rhomboid glossitis
  - Chronic mucocutaneous candidoses and oral manifestations of deep visceral mycoses

#### ULCERATIVE CONDITIONS

- Classify oral ulcerations
- Describe the clinical and histopathological features of aphthous ulcers and behcet's syndrome.

#### VESICULLOBULLOUS CONDITIONS

- Classify vesiculobullous diseases
- Discuss the clinical, histopathological features of following vesiculobullous diseases:
  - Pemphigus vulgaris;
  - Mucous membrane pemphigoid;
  - Pemphigoid.
  - Erythema multiforme.
  - Dermatitis Herpetiformis
  - Linear IgA disease
  - Epidermolysis bullosa

- Epidermolysis bullosa acquisita
- Angina bullosa haemorrhagica

#### HEREDITARY WHITES LESIONS

- Classify white lesion of oral mucosa according to their etiology.
- Explain the following hereditary white lesions:
  - Oral epithelial nevus
  - Leukoedema
  - Hereditary benign intraepithelial dyskeratosis
  - Follicular keratosis

#### REACTIVE WHITE LESIONS

- Describe Frictional hyperkeratosis, Nicotine stomatitis, Hairy leukoplakia and Hairy tongue.

#### PRENEOPLASTIC WHITE LESIONS

- Discuss the etiology, pathogenesis, clinical features, histopathology and prognosis of the following lesions:
  - Leukoplakia;
  - Oral Submucous fibrosis;
  - Lichen planus;
  - Lupus erythematosus;
  - Actinic cheilitis.

#### NEOPLASTIC LESIONS

- Define Carcinoma in situ
- Discuss the etiology, epidemiology, pathogenesis, clinical features, histopathology and prognosis of squamous cell carcinoma.
- Describe staging and grading of squamous cell carcinoma
- Describe the etiology, pathogenesis, clinical features, histopathology of basal cell carcinoma.

#### VASCULAR LESIONS

- Describe the etiology, pathogenesis, clinical features, and histopathology of congenital hemangioma.

#### REACTIVE LESIONS

- Discuss the etiology, pathogenesis, clinical features, and histopathology of the following reactive lesions:
  - Pyogenic granuloma
  - Peripheral giant cell granuloma
  - Peripheral Fibroma
  - Generalized Gingival Hyperplasia
  - Denture Induced Fibrous Hyperplasia

#### FORDYCE'S GRANULES

- Define Fordyce's Granules
- List clinical features of Fordyce's granules

#### SUBLINGUAL VARICES

- Define Sublingual varices

#### GEOGRAPHIC TONGUE

- Define Geographic tongue
- Describe clinical, pathogenesis, and histological features of geographic tongue

#### CROHN'S DISEASE

- Define Crohn's Disease
- Describe clinical, pathogenesis, and histological features of Crohn's disease

#### SARCOIDOSIS

- Define Sarcoidosis
- Describe clinical, pathogenesis, and histological features of Sarcoidosis

#### WEGENER'S GRANULOMATOSIS

- Define Wegener's Granulomatosis
- Describe clinical, pathogenesis, and histological features of Wegener's Granulomatosis

#### AMYLOIDOSIS

- Define Amyloidosis
- Describe clinical features of Amyloidosis

### ORAL PIGMENTATION

- Classify oral pigmentation
- Describe the clinical and histological features of oral lesions caused by exogenous and endogenous pigmentation.

### REACTIVE LESIONS OF SALIVARY GLAND

- Discuss the etiology, pathogenesis, clinical features and histopathology of the Mucous extravasation phenomenon, Mucus retention cyst and Necrotizing sialometaplasia.

### BACTERIAL AND VIRAL INFECTIONS OF SALIVARY GLAND

- Discuss the pathogenesis, clinical and diagnostic features of the following infections/condition of salivary glands:
  - Mumps
  - Bacterial sialadenitis
  - Sarcoidosis
  - Sjogren's syndrome
  - Xerostomia
  - Cytomegaloviral sialadenitis

### SALIVARY GLAND TUMORS

- Classify salivary gland tumors
- Discuss the pathogenesis and clinical and diagnostic features of the following salivary gland tumors:
  - Pleomorphic adenoma;
  - Warthin tumor;
  - Basal cell adenoma;
  - Oncocytoma;
  - Canalicular adenoma;
  - Mucoepidermoid carcinoma;
  - Acinic cell carcinoma;
  - Adenoid cystic carcinoma.

### INHERITED AND DEVELOPMENTAL DISORDERS OF BONE

- Classify disorders of bone



- Discuss the etiology, clinical features and radiographic features of Cherubism, Osteopetrosis and Cleidocranial dysplasia.

#### FIBRO-OSSEOUS LESIONS

- Classify fibro-osseous lesions
- Describe the etiology, clinical features, pathogenesis and histological behavior of various fibro-osseous lesions.

#### METABOLIC AND ENDOCRINAL DISORDERS OF BONE

- Discuss the etiology, pathogenesis, clinical, radiographic, and histological features of following metabolic conditions/disorders:
  - Paget's disease
  - Hyperparathyroidism
  - Hypothyroidism
  - Hyperthyroidism
  - Hypophosphatasia

#### CENTRAL GIANT CELL GRANULOMA

- Discuss the etiology, pathogenesis, clinical, radiographic, and histological features of central giant cell granuloma

#### TUMORS OF BONE

- Classify bone tumors
- Discuss the etiology, pathogenesis, clinical and diagnostic features of the following bone tumors:
  - Osteoma and osteoblastoma;
  - Osteosarcoma;
  - Ossifying fibroma.

#### DEVELOPMENTAL DISORDERS

- Discuss Aplasia, Hyperplasia and Hypoplasia of mandibular condyle

#### INFLAMMATORY DISORDERS

- Describe Traumatic arthritis, Infective arthritis and rheumatoid arthritis

#### OSTEOARTHRITIS

- Explain the etiology and clinical features of osteoarthritis

	<u>FUNCTIONAL DISORDERS</u> <ul style="list-style-type: none"> <li>• Discuss the etiology and clinical features of myofascial pain dysfunction syndrome and disc displacement.</li> </ul>
<b>INTERNAL ASSESSMENT</b>	10% (Pre-professional Examination, Midterm Examination, Assignments and Class Presentations)
<b>ANNUAL EXAMINATION</b>	90% (MCQS, OSPE)

\*.<https://www.granburydentalcenter.com/blog/hot-on-the-trail-with-oral-pathology/#:~:text=According%20to%20the%20American%20Dental,that%20understands%20the%20causes%20and>