

Third Year

1. General Medicine

GUIDELINES :

Special emphasis should be given throughout on the importance of various diseases as applicable to dentistry.

1. Special precautions/ contraindication of anaesthesia and various dental procedures in different systemic diseases.
2. Oral manifestations of systemic diseases.
3. Medical emergencies in dental practice.

A dental student should be taught in such a manner he/she is able to record the arterial pulse, blood pressure and be capable of suspecting by sight and superficial examination of the body – diseases of the heart, lungs, kidneys, blood etc. He should be capable of handling medical emergencies encountered in dental practice

THEORY SYLLABUS

CORE (Must Know)	TOPICS (Know)	COLLATERAL (Desirable to Know)	TOPICS
1. Aims of medicine signs, symptoms, differential diagnosis prognosis.	Definitions of diagnosis treatment & prognosis.		
2. Enteric fever, simplex, diphtheria.	Infections. AIDS, herpes zoster, syphilis	Infectious mononucleosis mumps, measles, rubella, malaria.	
3. Stomatitis, dysphagia, jaundice, hepatitis,	G.I.T. gingival hyperplasia, acid peptic disease, acute and chronic cirrhosis of liver ascites.	Diarrhea Dysentery Amoebiasis Malabsorption	
4. Acute rheumatic fever valvular heart disease, hypertension, disease, common arrhythmias,	CVS rheumatic heart disease, ischemic heart endocarditis, congenital		

heart disease, congestive cardiac failure		
5. Pneumonia, COPD, TB, Bronchial asthma	RS Pulmonary	Lung Pleural Pneumothorax Bronchiectasis Lung cancers. Abscess effusion
6. Anemias, bleeding & clotting disorders, leukemias, lymphomas, agranulocytosis, splenomegaly, oral manifestations of hematologic disorders, generalized Lymphadenopathy.	Hematology	
7. Acute nephritis syndrome	Renal System Nephrotic	Renal failure
8, Avitaminosis	Nutrition	Balanced diet PEM Avitaminosis
9. Facial palsy, facial pain including trigeminal neuralgia, epilepsy, headache including migraine.	CNS	- Meningitis - Examination of comatose patient - Examination of cranial nerves.
10. Diabetes Mellitus, Hypothyroidism, Calcium metabolism and parathyroids.	Endocrines Acromegaly, Thyrotoxicosis,	Addison's disease, Cushing's syndrome.
11. Syncope, cardiac arrest, shock	Critical care CPR,	Acute LVF ARDS

CLINICAL TRAINING:

The student must be able to take history, do general physical examination (including build, nourishment, pulse, BP, respiration, clubbing, cyanosis, jaundice, lymphadenopathy, oral cavity) and be able to examine CVS, RS and abdomen and facial nerve.

2. General Surgery

AIMS:

To acquaint the student with various diseases, which may require surgical expertise and to train the student to analyze the history and be able to do a thorough physical examination of the patient. The diseases as related to head and neck region are to be given due importance, at the same time other relevant surgical problems are also to be addressed. At the end of one year of study the student should have a good theoretical knowledge of various ailments, and be practically trained to differentiate benign and malignant diseases and be able to decide which patient requires further evaluation.

1. HISTORY OF SURGERY:

The development of surgery as a speciality over the years, will give the students an opportunity to know the contributions made by various scientists, teachers and investigators. It will also enable the student to understand the relations of various specialities in the practice of modern surgery.

2. GENERAL PRINCIPLES OF SURGERY:

Introduction to various aspects of surgical principles as related to orodental diseases. Classification of diseases in general. This will help the student to understand the various diseases, their relevance to routine dental practice.

3. WOUNDS:

Their classification, wound healing, repair, treatment of wounds, medico-legal aspects of accidental wounds and complications of wounds.

4. INFLAMMATION:

Of soft and hard tissues. Causes of inflammation, varieties, treatment and sequelae.

5. INFECTIONS:

Acute and chronic abscess skin infections, cellulitis, carbuncle, and erysepelas. Specific infections such as tetanus, gangrene, syphilis,

gonorrhoea, tuberculosis, Actinomycosis, Vincents angina, cancrum oris. Pyaemia, toxæmia and septicaemia.

6. TRANSMISSABLE VIRAL INFECTIONS:

HIV and Hepatitis B with special reference to their prevention and precautions to be taken in treating patients in a carrier state.

7. SHOCK AND HAEMORRHAGE:

Classification, causes, clinical features and management of various types of shock. Syncope, Circulatory collapse. Haemorrhage – different types, causes, clinical features and management. Blood groups, blood transfusion, precautions and complications of blood and their products. Hemophilia's, their transmission, clinical features and management especially in relation to minor dental procedures.

8. TUMOURS, ULCERS, CYSTS, SINUS AND FISTULAE:

Classification, clinical examination and treatment principles in various types of benign and malignant tumours, ulcers, cysts, sinus and fistulae.

9. DISEASES OF LYMPHATIC SYSTEM:

Especially those occurring in head and neck region. Special emphasis on identifying diseases such as tubercular infection, lymphomas, leukaemias, metastatic lymph node diseases.

10. DISEASES OF THE ORAL CAVITY:

Infective and malignant diseases of the oral cavity and oropharynx including salivary glands with special emphasis on preventive aspects of premalignant and malignant diseases of the oral cavity.

11. DISEASES OF LARYNX, NASOPHARYNX:

Infections and tumours affecting these sites. Indications, procedure and complications of tracheostomy.

12. NERVOUS SYSTEM:

Surgical problems associated with nervous system with special reference to the principles of peripheral nerve injuries, their regeneration and principles of treatment. Detailed description of affections of facial nerve And its management. Trigeminal neuralgia, its presentation and treatment.

13. FRACTURES:

General principles of fractures, clinical presentation and treatment with additional reference to newer methods of fracture treatment. Special emphasis on fracture healing and rehabilitation.

14. PRINCIPLES OF OPERATIVE SURGERY:

Principles as applicable to minor surgical procedures including detailed description of asepsis, antiseptics, sterilisation, principles of anaesthesia and principles of tissue replacement. Knowledge of sutures, drains, diathermy, cryosurgery and use of Laser in surgery.

15. ANOMOLIES OF DEVELOPMENT OF FACE:

Surgical anatomy and development of face. Cleft lip and cleft palate—principles of management.

16. DISEASES OF THYROID AND PARATHYROID:

Surgical anatomy, pathogenesis, clinical features and management of dysfunction of thyroid and parathyroid glands. Malignant diseases of the thyroid—classification, clinical features and management.

17. SWELLINGS OF THE JAW:

Differential diagnosis and management of different types of swellings of the jaw.

18. BIOPSY:

Different types of biopsies routinely used in surgical practice. Skills to be developed by the end of teaching is to examine a routine swelling, ulcer and other related diseases and to perform minor surgical procedures such as draining an abscess, taking a biopsy etc.

3. Oral Pathology and Oral Microbiology

OBJECTIVES:

At the end of Oral Pathology & Microbiology course, the student should be able to comprehend -

1. The different types of pathological processes, that involve the oral cavity.
2. The manifestations of common diseases, their diagnosis & correlation with clinical pathological processes.
3. An understanding of the oral manifestations of systemic diseases should help in correlating with the systemic physical signs & laboratory findings.
4. The student should understand the underlying biological principles governing treatment of oral diseases.
5. The principles of certain basic aspects of Forensic Odontology.

SKILLS

1. Microscopic study of common lesions affecting oral tissues through microscopic slides & projection slides.
2. Study of the disease process by surgical specimens.
3. Study of teeth anomalies/polymorphisms through tooth specimens & plaster casts.
4. Microscopic study of plaque pathogens.
5. Study of haematological preparations (blood films) of anaemias & leukemias.
6. Basic exercises in Forensic Odontology such as histological methods of age estimation and appearance of teeth in injuries.

1. INTRODUCTION:

A bird's eye view of the different pathological processes involving the oral cavity & oral cavity involvement in systemic diseases to be brought out. Interrelationship between General Medicine & General Surgery & Oral pathology to be emphasized.

2. Developmental disturbances of teeth, jaws and soft tissues of oral & paraoral region :

Introduction to developmental disturbances - Hereditary, Familial mutation, Hormonal etc. causes to be highlighted.

Developmental disturbances of teeth - Etiopathogenesis, clinical features, radiological features & histopathological features as appropriate :- The size, shape, number,

structure & eruption of teeth & clinical significance of the anomalies to be emphasized.

Developmental disturbances of jaws - size & shape of the jaws.

Developmental disturbances of oral & paraoral soft tissues - lip & palate - clefts, tongue, gingiva, mouth, salivary glands & face.

3. **Dental Caries :**

Etiopathogenesis, microbiology, clinical features, diagnosis, histopathology, immunology, prevention of dental caries & its sequelae.

4. **Pulp & Periapical Pathology & Osteomyelitis. Etiopathogenesis & interrelationship, clinical features, microbiology, histopathology & radiological features (as appropriate) of pulp & periapical lesions & osteomyelitis.**

Sequelae of periapical abscess - summary of space infections, systemic complications & significance.

5. **Periodontal Diseases :**

Etiopathogenesis, microbiology, clinical features, histopathology & radiological features (as appropriate) of gingivitis, gingival enlargements & periodontitis. Basic immunological mechanisms of periodontal disease to be highlighted.

6. **Microbial infections of oral soft tissues :**

Microbiology, defence mechanisms including immunological aspects, oral manifestations, histopathology and laboratory diagnosis of common bacterial, viral & fungal infections namely :-

Bacterial : Tuberculosis, Syphilis, ANUG & its complications - Cancrum Oris.

Viral : Herpes Simplex, Varicella zoster, Measles, Mumps & HIV infection.

Fungal : Candidal infection. Aphthous Ulcers.

7. Common non-inflammatory diseases involving the jaws :

Etiopathogenesis, clinical features, radiological & laboratory values in diagnosis of : Fibrous dysplasia, Cherubism, Osteogenesis Imperfecta, Paget's disease, Cleidocranial dysplasia, Rickets, Achondroplasia, Marfan's syndrome & Down's syndrome.

8. Diseases of TM Joint :

Ankylosis, summary of different types of arthritis & other developmental malformations, traumatic injuries & myofascial pain dysfunction syndrome.

9. Cysts of the Oral & Paraoral region :

Classification, etiopathogenesis, clinical features, histopathology, laboratory & radiological features (as appropriate) of Odontogenic cysts, Non-Odontogenic cysts, Pseudocysts of jaws & soft tissue cysts of oral & paraoral region.

10. Tumours of the Oral Cavity :

11. Classification of Odontogenic, Non-Odontogenic & Salivary Gland Tumours. Etiopathogenesis, clinical features, histopathology, radiological features & laboratory diagnosis (as appropriate) of the following common tumours

a) Odontogenic - all lesions.

b) Non-odontogenic

- Benign Epithelial - Papilloma, Keratoacanthoma & Naevi.

- Benign Mesenchymal - Fibroma, Aggressive fibrous lesions, Lipoma,

Haemangioma, Lymphangioma, Neurofibroma,
Schwannoma, Chondroma, Osteoma & Tori.

- Malignant Epithelial - Basal Cell Carcinoma, Verrucous Carcinoma,

Squamous Cell carcinoma & Malignant Melanoma.

- Malignant Mesenchymal - Fibrosarcoma, Osteosarcoma, Giant cell tumour, Chondrosarcoma, Angiosarcoma, Kaposi's sarcoma, Lymphomas, Ewing's sarcoma & Other Reticuloendothelial tumours.

c) Salivary Gland

- Benign Epithelial neoplasms - Pleomorphic Adenoma, Warthin's tumour, & Oncocytoma.

- Malignant Epithelial neoplasms - Adenoid Cystic Carcinoma, Mucoepidermoid Carcinoma, Acinic Cell Carcinoma & Adenocarcinomas.

d) Tumours of Disputed Origin - Congenital Epulis & Granular Cell Myoblastoma.

e) Metastatic tumours - Tumors metastasizing to & from oral cavity & the routes of metastasis.

Pyogenic & Giant cell granuloma, exostoses Fibrous Hyperplasia, Traumatic Ulcer & Traumatic Neuroma.

Attrition, Abrasion, Erosion, Bruxism, Hypercementosis, Dentinal changes, Pulp calcifications & Resorption of teeth.

Radiation effects of oral cavity, summary of Physical & Chemical injuries including allergic reactions of the oral cavity.

Healing of Oral wounds & complications - Dry socket.

12. **Non neoplastic Salivary Gland Diseases :**

Sialolithiasis, Sialosis, Sialadenitis, Xerostomia & Ptyalism.

13. **Systemic Diseases involving Oral cavity :**

Brief review & oral manifestations, diagnosis & significance of common Blood, Nutritional, Hormonal & Metabolic diseases of Oral cavity.

14. **Mucocutaneous Lesions :**

Etiopathogenesis, clinical features & histopathology of the following common lesions. Lichen Planus, Lupus Erythematosus, Pemphigus & Pemphigoid lesions, Erythema Multiforme, Psoriasis, Scleroderma, Ectodermal Dysplasia, Epidermolysis bullosa & White sponge nevus.

15. **Diseases of the Nerves :**

Facial neuralgias - Trigeminal & Glossopharyngeal. VII nerve paralysis, Causalgia.

Psychogenic facial pain & Burning mouth syndrome.

16. **Pigmentation of Oral & Paraoral region & Discolouration of teeth :**

causes & clinical manifestations.

17. **Diseases of Maxillary Sinus :**

Traumatic injuries to sinus, Sinusitis, Cysts & Tumours involving antrum.

18. **Biopsy:**

a) ORAL PRECANCER – CANCER : Epidemiology, aetiology, clinical and histopathological features, TNM classification, Recent advances in diagnosis.

b) Types of Biopsy, value of biopsy, cytology, histochemistry & frozen sections in diagnosis of oral diseases.

19. **Principles of Basic Forensic Odontology (Pre-clinical Forensic Odontology):**

Introduction, definition, aims & scope.

Sex and ethnic (racial) differences in tooth morphology and histological age estimation

Determination of sex & blood groups from buccal mucosa / saliva.

Dental DNA methods

Bite marks, rugae patterns & lip prints.

Dental importance of poisons and corrosives.

Overview of forensic medicine and toxicology

RECOMMENDED BOOKS

1. A Text Book of Oral Pathology - Shafer, Hine & Levy.
2. Oral Pathology - Clinical Pathologic correlations - Regezi & Sciubba.
3. Oral Pathology -Soames & Southam.
4. Oral Pathology in the Tropics - Prabhu, Wilson, Johnson & Daftary