

## 4A.4.2 SYLLABUS ( Including Teaching Hours.)

### MUST KNOW

1.Oral medicine and diagnostic AIDS:

#### **Section A-Diagnostic Methods                    06 HRS**

- (1) Definition and importance of Diagnosis and various types of diagnosis
- (2) Method of clinical examinations.
  - (a) General Physical examination by inspection.
  - (b) Oro-facial region by inspection, palpation and other means
  - (c) To train the students about the importance, role, use of saliva and techniques of diagnosis of saliva as part of oral disease
  - (d) Examination of lesions like swellings, ulcers, erosions, sinus, fistula, growths, pigmented lesions, white and red patches
  - (e) Examination of lymph nodes
- (3) Investigations
  - (a) Biopsy and exfoliative cytology
  - (b) Hematological, Microbiological and other tests and investigations necessary for diagnosis and prognosis

#### **Section B- Diagnosis, Differential Diagnosis                    04 HRS**

- (1) Teeth: Developmental abnormalities, causes of destruction of teeth and their sequelae and discoloration of teeth
- (2) Inflammation – Injury, infection and spread of infection, fascial space infections, osteoradionecrosis.
- (3) Temporomandibular joint: Developmental abnormalities of the condyle. Rheumatoid arthritis, Osteoarthritis, Subluxation and luxation.
- (4) Periodontal diseases: Gingival hyperplasia, gingivitis, periodontitis, pyogenic granuloma
- (5) Common cysts and Tumors:

CYSTS: Cysts of soft tissue: Mucocele and Ranula                    07 HRS

Cysts of bone: Odontogenic and nonodontogenic.

TUMORS:

Soft Tissue:

Epithelial: Papilloma, Carcinoma, Melanoma

Connective tissue: Fibroma, Lipoma, Fibrosarcoma

Vascular: Haemangioma, Lymphangioma

Nerve Tissue: Neurofibroma, Traumatic Neuroma, Neurofibromatosis

Salivary Glands: Pleomorphic adenoma, Adenocarcinoma, Warthin's Tumor, Adenoid cystic carcinoma.

- (6) Teeth: Developmental abnormalities, causes of destruction of teeth and their sequelae and discoloration of teeth
- (7) Inflammation – Injury, infection and spread of infection, fascial space infections, osteoradionecrosis.
- (8) Temporomandibular joint: Developmental abnormalities of the condyle. Rheumatoid arthritis, Osteoarthritis, Subluxation and luxation.
- (9) Periodontal diseases: Gingival hyperplasia, gingivitis, periodontitis, pyogenic granuloma
- (10) Common cysts and Tumors:

CYSTS: Cysts of soft tissue: Mucocele and Ranula

Cysts of bone: Odontogenic and nonodontogenic.

TUMORS:

Soft Tissue:

Epithelial: Papilloma, Carcinoma, Melanoma

Connective tissue: Fibroma, Lipoma, Fibrosarcoma

Vascular: Haemangioma, Lymphangioma

Nerve Tissue: Neurofibroma, Traumatic Neuroma, Neurofibromatosis

Salivary Glands: Pleomorphic adenoma,

Adenocarcinoma, Warthin's Tumor, Adenoid cystic carcinoma.

Hard Tissue:

Non Odontogenic: Osteoma, Osteosarcoma,

Osteoclastoma, Chondroma, Chondrosarcoma, Central giant cell tumor, and Central haemangioma

Odontogenic: Enameloma, Ameloblastoma, Calcifying Epithelial Odontogenic tumor, Adenomatoid

Odontogenic tumor, Periapical cemental dysplasia and

Odontomas

### **Section C-Oral medicines and therapeutics                      18 HRS**

(1) Infections of oral and paraoral structures:

Bacterial: Streptococcal, tuberculosis, syphilis, Vincent's, leprosy, actinomycosis, diphtheria and tetanus

Fungal: Candida albicans

Virus: Herpes simplex, herpes zoster, Ramsay Hunt syndrome, measles, herpangina, mumps, infectious mononucleosis, AIDS and hepatitis-B

(2) Important common mucosal lesions:

White lesions: Chemical burns, leukoedema, leukoplakia, Fordyce spots, stomatitis nicotina palatinus, white sponge nevus, candidiasis, lichen planus, discoid lupus erythematosus

Vesiculo-bullous lesions: Herpes simplex, herpes zoster, herpangina, bullous lichen planus, pemphigus, cicatricial pemphigoid erythema multiforme.

Ulcers: Acute and chronic ulcers

Pigmented lesions: Exogenous and endogenous

Red lesions: Erythroplakia, stomatitis venenata and medicamentosa, erosive lesions and denture sore mouth.

(3) Cervico-facial lymphadenopathy

(4) Facial pain:

(i) Organic pain: Pain arising from the diseases of orofacial tissues like teeth, pulp, gingival, periodontal tissue, mucosa, tongue, muscles, blood vessels, lymph tissue, bone, paranasal sinus, salivary glands etc.,

(5) Tongue in local and systemic disorders: (Aglossia, ankyloglossia, bifid tongue, fissured tongue, scrotal tongue, macroglossia, microglossia, geographic tongue, median rhomboid glossitis, depapillation of tongue, hairy tongue, atrophic tongue, reactive lymphoid hyperplasia, glossodynia, glossopyrosis, ulcers, white and red patches etc.)

(6) Oral manifestations of:

(i) Metabolic disorders:

(a) Porphyria

(b) Haemochromatosis

(c) Histiocytosis X diseases

(ii) Endocrine disorders:

(a) Pituitary: Gigantism, acromegaly, hypopituitarism

(b) Adrenal cortex: Addison's disease (Hypofunction) Cushing's syndrome (Hyperfunction)

(c) Parathyroid glands: Hyperparathyroidism.

(d) Thyroid gland: (Hypothyroidism) Cretinism, myxedema

(e) Pancreas: Diabetes

- (iii) Nutritional deficiency: Vitamins: riboflavin, nicotinic acid, folic acid Vitamin B12, Vitamin C (Scurvy)
- (iv) Blood disorders:
  - (a) Red blood cell diseases
    - Deficiency anemias: (Iron deficiency, plummer – vinson syndrome, pernicious anemia)
    - Haemolytic anemias: (Thalassemia, sickle cell anemia, erythroblastosis fetalis) Aplastic anemia, Polycythemia
  - (b) White Blood cell diseases
    - Neutropenia, cyclic neutropenia, agranulocytosis, infectious mononeucleosis and leukemias
  - (c) Haemorrhagic disorders:
    - Thrombocytopenia, purpura, hemophillia, christmas disease and von willebrand's disease
- (8) Disease of salivary glands:
  - (i) Development disturbances: Aplasia, atresia and aberration
  - (ii) Functional disturbances: Xerostomia, ptyalism
  - (iii) Inflammatory conditions: Nonspecific sialadenitis, mumps, sarcoidosis, heerdfort's syndrome (Uveoparotid fever), Necrotising sialometaplasia
  - (iv) Cysts and tumors: Mucocele, ranula, pleomorphic adenoma, mucoepidermoid carcinoma
  - (v) Miscellaneous: Sialolithiasis, Sjogren's syndrome, mikuliez's disease and sialosis
- (7) Dermatological diseases with oral manifestations:
  - (a) Ectodermal dysplasia (b) Hyperkerotosis palmarplantaris with periodontopathy (c) Scleroderma (d) Lichen planus including ginspan's syndrome (e) Lupus erythematosus (f) Pemphigus (g) Erythema multiforme (h) Psoriasis
- (8) Immunological diseases with oral manifestations
  - (a) Leukemia (b) Lymphomas (c) Multiple myeloma (d) AIDS clinical manifestations, opportunistic infections, neoplasms (e) Thrombocytopenia (f) Lupus erythematosus (g) Scleroderma (h) dermatomyositis (I) Submucous fibrosis (j) Rheumatoid arthritis (k) Recurrent oral ulcerations including behcet's syndrome and reiter's syndrome
- (9) Allergy: Local allergic reactions, anaphylaxis, serum sickness (local and systemic allergic manifestations to food drugs and chemicals)
- (10) Foci of oral infection and their ill effects on general health
- (11) Management of dental problems in medically compromised persons:
  - (i) Physiological changes: Puberty, pregnancy and menopause
  - (ii) The patients suffering with cardiac, respiratory, liver, kidney and bleeding disorders, hypertension, diabetes and AIDS. Post-irradiated patients.
- (11) Precancerous lesions and conditions
- (12) Neuralgic pain due to unknown causes: Trigeminal neuralgia
- (13) MPDS, Bell's palsy

## **DESIRABLE TO KNOW**

**10HRS**

Forensic examination – Procedures for post-mortem dental examination; maintaining dental records and their use in dental practice and post-mortem identification; jurisprudence and ethics

- (1) Diseases of bone and Osteodystrophies: Development disorders: Anomalies, Exostosis and tori, infantile cortical hyperostosis, osteogenesis imperfecta, Marfan syndrome, osteopetrosis.
- (2) Metabolic disorders – Histiocytosis
- (3) Endocrine – Acro-megaly and hyperparathyroidism
- Miscellaneous – Paget's disease, Mono and polyostotic fibrous dysplasia, Cherubism.

(4) Granulomatous diseases: Tuberculosis, Sarcoidosis, Midline lethal granuloma, Crohn's Disease and Histiocytosis X

(5) Miscellaneous Disorders: Burkitt lymphoma, sturge – Weber syndrome, CREST syndrome, Rendu-Osler-Weber disease

1) Pain arising due to C.N.S. diseases: (a) Pain due to intracranial and extracranial involvement of cranial nerves. (Multiple sclerosis, cerebrovascular diseases, trochanter's syndrome etc.)

(b) Neuralgic pain due to unknown causes: glossopharyngeal neuralgia, sphenopalatine ganglion neuralgia, periodic migrainous neuralgia and atypical facial pain

(iii) Referred pain: Pain arising from distant tissues like heart, spine etc.,

(2) Altered sensations: paresthesia, halitosis

(3) Nerve and muscle diseases:

(i) Nerves: (a) Neuropraxia (b) Neurotmesis (c) Neuritis (d) Facial nerve paralysis including Heerfordt's syndrome, Melkersson Rosenthal syndrome and Ramsay Hunt syndrome (e) Neuroma (f) Neurofibromatosis (g) Frey's syndrome

(ii) Muscles: (a) Myositis ossificans (b) Myofascial pain dysfunction syndrome

(c) Trismus

(4) Forensic odontology:

(a) Medicolegal aspects of orofacial injuries

(b) Identification of bite marks

(c) Determination of age and sex

(d) Identification of cadavers by dental appliances, Restorations and tissue remnants

(5) Therapeutics: General therapeutic measures – drugs commonly used in oral medicine viz., antibiotics, chemotherapeutic agents, anti-inflammatory and analgesic drugs, astringents, mouth washes, styptics, demulcents, local surface anaesthetic, sialogogues, antisialogogues and drugs used in the treatment of malignancy

## **ORAL RADIOLOGY**

### **MUST KNOW**

**20 HRS**

(1) Scope of the subject and history of origin (2) Physics of radiation: (a) Nature and types of radiations

(b) Source of radiations (c) Production of X-rays (d) Properties of X-rays

(e) Compton effect (f) Photoelectric effect (g) Radiation measuring units

(3) Biological effects of radiation

(4) Radiation safety and protection measures

(5) Principles of image production

(6) Radiographic techniques:

(i) Intra-Oral: (a) Periapical radiographs (Bisecting and parallel techniques) (b) Bite wing radiographs (c) Occlusal radiographs

(ii) Extra-oral: (a) Lateral projections of skull and jaw bones and paranasal sinuses (c) Cephalograms (d) Orthopantomograph (e) Projections of temporomandibular

joint and condyle of mandible (f) Projections for Zygomatic arches

(iii) Specialised techniques: (a) Sialography (b) Xeroradiography (c) Tomography

(7) Factors in production of good radiographs:

(a) K.V.P. and mAs of X-ray machine (b) Filters (c) Collimations (d) Intensifying screens (e) Grids (f) X-ray films (g) Exposure time (h) Techniques (i) Dark room (j) Developer and fixer solutions (k) Film processing

- (8) Radiographic normal anatomical landmarks
- (9) Faculty radiographs and artefacts in radiographs
- (10) Interpretation of radiographs in various abnormalities of teeth, bones and other orofacial tissue.

**DESIRABLE TO KNOW                      10 HRS**

Principles of radiotherapy of orofacial malignancies and complications of radiotherapy  
 Contrast radiography and basic knowledge of radio-active isotopes  
 Radiography in Forensic Odontology - Radiographic age estimation and post-mortem radiographic methods

**4A.4.3 EXAMINATION PATTERN**

SR. NO	NAME OF THE EXERCISE	TIME ALLOTTED	MARKS ALLOTTED
1.	Spotters	18 mins	25 marks
2	Case History Taking	30 mins	25 marks
3	IOPA Taking And Interpretation	30 mins	25 marks
4	Journal		5 marks
5	Internal Assessment And Attendance		20 marks
	<b>TOTAL</b>	<b>1 Hour &amp; 18mins</b>	<b>100 marks</b>