

**DR.M.G.R EDUCATIONAL & RESEARCH INSTITUTE UNIVERSITY**  
**DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY**

<b>Subject Code:</b>	<b>Subject Name :</b> Oral And Maxillofacial Surgery	<b>T / L/ ETL</b>	<b>L</b>	<b>T / S.Lr</b>	<b>P/ R</b>
	Prerequisite:	T			

L : Lecture T : Tutorial SLr : Supervised Learning P : Project R : Research C: Credits  
T/L/ETL : Theory/Lab/Embedded Theory and Lab.

**OBJECTIVE:**

- Able to diagnose, manage and treat patients with basic oral surgical problems
- Have a broad knowledge of maxillofacial surgery and oral implantology
- Should be familiar with legal, ethical and moral issues pertaining to the patient care and communication skills
- Should have acquired the skill to examine any patient with an oral surgical problem in an orderly manner
- Understand and practice the basic principles of asepsis and sterilisation
- Should be competent in the extraction of the teeth under both local and general anaesthesia
- Competent to carry out certain minor oral surgical procedure under LA like trans-alveolar extraction, frenectomy, dento alveolar procedures, simple impaction, biopsy, etc.
- Competent to assess, prevent and manage common complications that arise during and after minor oral surgery
- Able to provide primary care and manage medical emergencies in the dental office
- Familiar with the management of major oral surgical problems and principles involved in the inpatient management.

**SKILLS:**

1. A graduate should have acquired the skill to examine any patient with an oral surgical problem in an orderly manner. Be able to understand requisition of various clinical and laboratory investigations and is capable of formulating differential diagnosis.
2. Should be competent in the extraction of teeth under both local and general anesthesia.
3. Should be able to carry out certain minor oral surgical procedures under L.A. like frenectomy, alveolar procedures & biopsy etc.
4. Ability to assess, prevent and manage various complications during and after surgery.
5. Able to provide primary care and manage medical emergencies in the dental office.
6. Understanding of the management of major oral surgical problems and principles involved in patient management.

**COURSE OUTCOMES (COs) : ( 3- 5)**

<b>CO1</b>	Able to apply the knowledge gained in the related medical subjects like pathology, microbiology and general medicine in the management of patients with oral surgical problem.
<b>CO2</b>	Able to diagnose, manage and treat (understand the principles of treatment of) patients with oral surgical problems.
<b>CO3</b>	To gain Knowledge of range of surgical treatments
<b>CO4</b>	Ability to decide the requirement of a patient to have oral surgical specialist opinion or treatment.
<b>CO5</b>	Understand the principles of in-patient management
<b>CO6</b>	Understanding of the management of major oral surgical procedures and principles involved in patient management
<b>CO7</b>	To know ethical issues and communication ability.

**Mapping of Course Outcomes with Program Outcomes (POs)**

<b>Cos/Pos</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>	<b>PO11</b>	<b>PO12</b>
CO1	H	H	H	H	H	M	M	M	L	L	H	H
CO2	H	H	H	H	H	M	M	M	L	L	H	H
CO3	H	H	H	H	H	M	M	M	L	L	H	H
CO4	H	H	H	H	H	M	M	M	L	L	H	H
CO5	H	H	H	H	H	M	M	M	L	L	H	H
CO6	H	H	H	H	H	M	M	M	L	L	H	H
CO7	H	H	H	H	H	M	M	M	L	L	H	H

COs /PSOs	PSO1	PSO2	PSO3	PSO4					
CO1	M	H	M	H					
CO2	M	H	M	H					
CO3	M	H	M	H					
CO4	M	H	M	H					
CO5	M	H	M	H					
CO6	M	H	M	H					
CO7	M	H	M	H					
<b>H/M/L indicates Strength of Correlation H- High, M- Medium, L-Low</b>									
Category	Basic Sciences	Medical and Allied Health Science	Humanities and Social Sciences	Program Core	Program Electives	Open Electives	Practical / Project	Internships / Technical Skill	Soft Skills
				✓					
Approval									

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### DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY

**UNIT1.** Introduction, definition, scope, aims and objectives.

**UNIT 2.** Diagnosis in oral surgery- History taking-Clinical examination-Investigations.

**UNIT 3.** Principles of infection control and cross-infection control with particular reference to HIV/AIDS and Hepatitis.

**UNIT 4.** Principles of Oral Surgery-Asepsis: Definition, measures to prevent introduction of infection during surgery-Preparation of the patient-Measures to be taken by operator-Sterilisation of instruments - various methods of sterilization-Surgery setup-Painless Surgery-Pre-anaesthetic-consideration-Pre-medication-purpose-Anaesthetic considerations -Local with IV sedations-Use of general anaesthetic-Access: Intra-oral: Mucoperiosteal flaps, principles, commonly used intra oral incisions-Bone Removal: Methods of bone removal-Use of Burs: Advantages & precautions-Bone cutting instruments: Principles of using chisel & osteotome-Extra-oral: Skin incisions - principles, various extra-oral incision to expose facial skeleton-Submandibular-Pre auricular-Incision to expose maxilla & orbit-Bicoronal incision-Control of haemorrhage during surgery-Normal Haemostasis-Local measures available to control bleeding-Hypotensive anaesthesia- Drainage & Debridement-Purpose of drainage Types of drains-Debridement: purpose, soft tissue & bone debridement-Closure of wounds-Suturing: Principles, suture material, classification, body response to various materials-Post operative instructions-Physiology of cold and heat-Control of pain – analgesics- Control of infection – antibiotics-Control of swelling - anti-inflammatory drugs-Long term post-operative follow up - significance.

**UNIT 5.**Exodontia: General considerations-Ideal Extraction.-Indications for extraction of teeth-Extractions in medically-compromised patients-Methods of extraction -Forceps or intra-alveolar or closed method-Trans-alveolar, surgical or open method, Indications, surgical procedure-Dental elevators: uses, classification, principles in the use of elevators Complications of Exodontia -Complications during exodontia-Common to both maxilla and mandible-Post-operative complications -Prevention and management of complications.

**UNIT 6.**Impacted teeth:Incidence, definition, aetiology- Impacted mandibular third molar-Classification, reasons for removal,-Assessment - both clinical & radiological-Surgical procedures for removal.-Complications during and after removal,-Prevention and management- Maxillary third molar-Indications-classification-Surgical procedure for removal-Impacted maxillary canine-Reasons for canine impaction-Localization, indications for removal-Methods of management, labial and palatal approach-Surgical exposure, transplantation, removal etc.

**UNIT 7.** Pre-prosthetic Surgery: Definition, classification of procedures-Corrective procedures: Alveoloplast-Reduction maxillary tuberosities-Frenectomies and removal of tori-Ridge extension or Sulcus extension procedures-

Indications and various surgical procedures-Ridge augmentation and reconstruction-Indications-use of bone grafts-Hydroxyapatite Implants - concept of osseointegration-Knowledge of various types of implants-surgical procedure to place implants.

**UNIT 8.** Diseases of the maxillary sinus-Surgical anatomy of the sinus-Sinusitis both acute and chronic-Surgical approach of sinus - Caldwell-Luc procedure-Removal of root from the sinus-Oro-antral fistula-aetiology-clinical features -various surgical methods for closure.

**UNIT 9.** Disorders of T.M. Joint Applied surgical anatomy of the joint-Dislocation - Types, aetiology, clinical features and management-Ankylosis - Definition, aetiology, clinical features and management-Myofascial pain dysfunction-syndrome, aetiology, clinical features, management-Non surgical and surgical-Internal derangement of the joint-Arthritis of T.M. Joint.

**UNIT 10.** Infections of the Oral cavity-Introduction, factors responsible for infection, course of odontogenic infections, spread of odontogenic infections through various facial spaces-Dento-alveolar abscess - aetiology, clinical features and management-Osteomyelitis of the jaws - definition, aetiology, predisposing factors-classification, clinical features and management-Ludwig's angina - definition, aetiology, clinical features, management-complications.

**UNIT 11.** Benign cystic lesions of the jaws -Definition, classification, pathogenesis-Diagnosis-Clinical features, radiological, aspiration biopsy, use of contrast-media and histopathology.-Management - Types of surgical procedures, Rationale of the techniques-indications, procedures, complications etc.

**UNIT 12.** Tumours of the Oral cavity -General considerations-Non odontogenic benign tumours occurring in oral cavity - fibroma, papilloma-lipoma, ossifying fibroma, myxoma-Ameloblastoma - Clinical features, radiological appearance methods of management-Carcinoma of the oral cavity -Biopsy – types-TNM classification-Outline of management of squamous Cell carcinoma: surgery, radiation and chemotherapy-Role of dental surgeons in the prevention and early detection of oral cancer.

**UNIT 13.** Fractures of the jaws -General considerations, types of fractures, aetiology, clinical features and general principles of management-mandibular fractures-Applied anatomy, classification-Diagnosis - Clinical and radiological Management - Reduction closed and open Fixation and immobilisation methods-Outline of rigid and semi-rigid internal fixation-Fractures of the condyle - aetiology, classification, clinical features, principles of management-Fractures of the middle third of the face-Definition of the mid face, applied surgical anatomy, classification, clinical features and outline of management-Alveolar fractures - methods of management-Fractures of the Zygomatic complex Classification, clinical features, indications for treatment, various methods of reduction and fixation-Complications of fractures - delayed union, non-union and malunion.

**UNIT 14.** Salivary gland diseases -Diagnosis of salivary gland diseases'-Sialography, contrast media, procedure-Infections of the salivary glands

Sialolithiasis - Sub mandibular duct and gland and parotid duct-Clinical features, management-Salivary fistulae-Common tumours of salivary glands like Pleomorphic adenoma including-minor salivary glands.

**UNIT 15.** Jaw deformities -Basic forms - Prognathism, Retrognathism and open bite-Reasons for correction-Outline of surgical methods carried out on mandible and maxilla.

**UNIT 16.** Neurological disorders -Trigeminal neuralgia - definition, aetiology, clinical features and methods – management including surgical-Facial paralysis - Aetiology, clinical features-Nerve injuries - Classification, neurolysis etc.

**UNIT 17.** Cleft Lip and Palate -Aetiology of the clefts, incidence, classification, role of dental surgeon in the management of cleft patient-Outline of the closure procedures.

**UNIT 18.** Medical Emergencies in dental practice –Primary care of medical emergencies in dental practice particularly -Cardio vascular-Respiratory-Endocrine-Anaphylactic reaction –Epilepsy-Epilepsy

**UNIT 19.** Emergency drugs & Intra muscular I.V. Injections-Applied anatomy, Ideal location for giving these injections, techniques etc.

**UNIT 20.** Oral Implantology

**UNIT 21.** Ethics

**TOTAL NUMBER OF HOURS: Lecture-70, clinicals-270**

#### **RECOMMENDED BOOKS:**

1. Impacted teeth; Alling John F & etal.
2. Principles of oral and maxillofacial surgery; Vol.1,2 & 3 Peterson LJ & etal.
3. Text book of oral and maxillofacial surgery; Srinivasan B.
4. Handbook of medical emergencies in the dental office, Malamed SF.
5. Killeys Fractures of the mandible; Banks P.

6. Killeys fractures of the middle 3rd of the facial skeleton; Banks P.
7. The maxillary sinus and its dental implications; McGovanda
8. Killey and Kays outline of oral surgery – Part-1; Seward GR & etal
9. Essentials of safe dentistry for the medically compromised patients; Mc Carthy FM
10. Oral & maxillofacial surgery, Vol 2; Laskin DM
11. Extraction of teeth;Howe, GL
12. Minor Oral Surgery; Howe.GL
13. Contemporary oral and maxillofacial surgery; Peterson I.J.& EA
14. Oral and maxillofacial infections; Topazian RG & Goldberg MH

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