The Arab League Council of Arab Health Ministers The Arab Board of Health Specializations General Secretariat



جامعة الرول العربية مجلس وزراء الصحة العرب المجلس العربي للاختصاصات الصحية الأمانة العامة

المجلس العلمي لجراحة الفم والوجه والفكين Scientific Council of Oral and Maxillofacial Surgery

دليل اختصاص جراحة الفم والوجه والفكين Guidebook of Oral and Maxillofacial Surgery

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Introduction

Oral and Maxillofacial Surgery is a surgical specialty of dentistry which combine the dental, medical and surgical practice as a hospital-based services.

It's the dental qualification which differentiate Oral and Maxillofacial Surgery from other specialties.

The department of Oral and Maxillofacial Surgery plays an important role in various interdepartmental collaborations, Including:

- 1. Management of polytrauma patients with the Trauma Unit of the Department of General Surgery, Orthopaedic Surgery Department and Accident and Emergency.
- 2. Orthognathic surgery and Cleft palate reconstruction in conjunction with the Departments of Orthodontics Paediatric Dentistry and Plastic and Reconstructive Surgery.
- 3. Plastic and Reconstructive Surgery.
- 4. Department of Oncology and Radiotherapy.
- 5. Department of Head and Neck Surgery, Otolaryngology (ENT).
- 6. Rehabilitation of patients with dental implants in the Department of Oral Rehabilitation.

The Training program is five years, during these years the trainee will have progressive training and education with 12-14 months of rotations in medical and surgical specialties with full responsibility with patient's care.

The training program is structured and at the end of training the candidate must demonstrate the ability to conduct consultation and show good sound clinical knowledge and be able to perform a complete competent diagnosis and therapeutic care of patients with Oral &Maxillofacial Surgery problems

The training will be in various Oral and Maxillofacial Surgery units approved for training by the Arab Board of health specialties Training program

The Oral and Maxillofacial surgery Arab Board Program was Launched in 1996 under the umbrella of the Arab Board of medical specialist which changed now to Arab Board of Health specialties

Its 5 years training program in approved center at various parts of the Arab world It's hospital-based dentistry specialty with with integrated progressive medical and surgical training.

<u>The Aims</u>

The main aim of this curriculum is to allow trainees to become competent in the specialty. The Trainee must demonstrate full and proactive engagement through careful understanding of learning objectives, self-directed learning, openness to reflective feedback and formative assessment, self-care and wellbeing, and the ability of seeking support when needed.

Scientific council of oral and maxillofacial surgery

The scientific council consists of specialists in oral and maxillofacial surgery who have experience and practice in this field (Appendix number 1) and includes the following:

- 1. Council president.
- 2. Council vice-president.

- 3. Committee of decision, characterization, training, and exchange of experience. It consists of seven members, including the committee rapporteur.
- 4. The examinations committee is composed of seven members, including the committee rapporteur.
- 5. The executive committee shall consist of the council president, the council vice-president, and three committee rapporteurs.

Scientific Council Duties:

- 1. Implementation of the general policy and plans to achieve the objectives of the program.
- 2. Setting work-route strategy and supervising the specialization of oral and maxillofacial surgery throughout the specialization certificate.
- 3. Describing supervision and training, and creating committees stemming from the scientific board to undertake the task per se.
- 4. Setting the regulating instructions for examinations and recommending certificates issuing.
- 5. Organizing courses for training the current and the graduates participants in the specialization field, who aspire to or previously register in the program to prepare the properly. This is achieved in cooperation with academic medical institutions related to the specialty worldwide.
- 6. Publishing pamphlets and other publications which contribute to instigating the scientific board objectives.
- 7. Contributing to publishing references in the specialization field and cooperating with Arab and international information and data centers.
- 8. Issuing the instructions which organize and facilitate the application of the training program.

Training Program Objectives For Trainees to Obtain the Scientific Board Certificate

- 1. Enabling the graduate to obtain the standard training skills regarding surgical and applied sciences, in addition to medical knowledge in the field of oral and maxillofacial surgery.
- 2. Enabling the graduate to acquire the right standpoint required for qualifying them to undertake initiative responsibility as a specialist in oral and maxillofacial surgery; this is held in tandem to managing patients and those co-working with them inside the health and medical firms.
- 3. Enabling the graduate to achieve sustainable automatic follow-up of ongoing medical learning in regard to oral and maxillofacial surgery in the applied and scientific aspects.
- 4. Enabling the trainee practitioner to cull sufficient clinical information to develop their ability of taking therapeutic and surgical decisions appropriate as to working as specialist in the field of oral and maxillofacial surgery.
- 5. Enabling the graduate to have sufficient surgical expertise to undertake their job as specialist in the field of oral and maxillofacial surgery in secured and accurate outcome.
- 6. Qualifying the graduate to recognize the etiology of oral and maxillofacial diseases in the environment where the specialist lives, and ways of controlling and safeguarding them.

7. Qualifying the graduate to initiate scientific research and participate in the process of teaching and learning.

Program Director:

The Program Director in each recognized center by the Arab board of Health Specialty is responsible to make the curriculum implementation most successful Training committee members, and in particular, the program administrator, specialists, and chief resident, will have a significant impact on the program implementation. Trainees should be enabled to share the responsibility in curriculum implementation. The Arab Board of health Specialties will apply the best practice models in training governance to achieve the best quality of training.

The Training Department and the training board committee will have a major role in training supervision and implementation.

Trainer Requirements:

- 1. Achieved the highest clinical degree in the field of oral and maxillofacial surgery equivalent to the board certificate in the specialty,
- 2. Had minimum 10 years' experience of hospital-based practice after awarding the specialty degree.
- 3. Teaching experience which includes teaching methodology, post graduate supervision or university teaching staff member.
- 4. Research activity not less than three published papers in indexed journals.

Trainer Commitments

- 1. Continuous regular assessment for the trainee via scientific and clinical supervision by sending the results of the evaluation and copies of the scientific records.
- 2. Work to raise the efficiency of the trainee in accordance with their training years.
- 3. Setting order for the scientific and practical activities and working on documenting that in their scientific portfolio.
- 4. Sending the scientific portfolio to the training committee whenever needed.
- 5. Sending a recommendation to the scientific board training committee, which is responsible for oral and maxillofacial specialization, to ensure that the trainee has performed the required number of operations which qualifies them to take part in the final exam three months before the exam.

Trainee Entry requirements:

The applicant must be not more than 40 years old at the time of admission and must fulfill the following requirements:

- 1. Board recognized BDS, (bachelor's degree in dentistry).
- 2. Fully committed on full time basis during the training programmed
- 3. Have successfully completed 12 months of internship.
- 4. One year training in oral and maxillofacial unit in hospital recognized by the local authority.

During this year the candidate must complete the following:

- 1. Accredited certificate in Basic and Advanced Trauma Life Support.
- 2. English language test ILETS Score 5,5 and above or equivalent.

- 3. Computer skills user certificate (ICDL)
- 4. Admission exam which holding by the Arab board committee to assess the above-mentioned criteria in 1, 2, 3.

Trainee's commitments

- 1. The trainee must be fully committed to the rules and regulations of the scientific council of oral and maxillofacial surgery
- 2. The trainee must participate in one of the following activities:
 - a. Thesis in oral and maxillofacial surgery.
 - b. Publication of scientific paper in high index journal.
 - c. Participating in the presentation of research in international conferences in the field of oral and maxillofacial surgery.
- 3. The trainee annually records their clinical activity in their scientific portfolio according to the formula approved by the scientific council.

Terminating the Trainee's Registration

- 1. If the absence percentage exceeded 25% per year without acceptable reason, they have to repeat the training program in that year. Once this absence percentage exists in another year, the trainee's registration is terminated.
- 2. If the trainee withdraws the program.
- 3. If they doubled the minimum period set to the program, or repeated each training year more than once, with the exception of the fifth year.
- 4. If the trainee repeated the final year more than thrice, their registration would be cancelled.
- 5. Stopping the program for a maximum limit of one year via the trainee is accepted as long as it comes after a valid reason accepted by the council.
- 6. The one who passed the written final exam is entitled to proceed to the clinical and oral exam where they can benefit from four-time repetition upon failure, after which the trainee can be given an additional trial for this exam.

Specification of training center

Qualified hospitals in the Arab countries, which meet the specifications and conditions applied by the Arab council for health specialties to be approved as training center.

Specialization Certificate

The Arab Board of health specializations grants a certificate in oral and maxillofacial surgery titled in English as:

Arab Board in Oral and Maxillofacial Surgery

Duration of the program: 5 years

Year one: first year

Dento- alveolar and Oral surgery /oral pathology and oral Medicine clinics with tutorials for months to cover the clinical and theoretical in these subjects:

- 1. Dentoalveolar surgery
- 2. Suturing techniques of wounds in the head and neck region
- 3. Different types of local anesthesia techniques (infiltration versus block)
- 4. Incision and drainage of an abscess, extra or in-traoral
- 5. Surgical and non-Surgical teeth extraction
- 6. Surgical removal of impacted teeth
- 7. Management of post-extraction bleeding and complications, including dry sockets, sharp bony edges,
- 8. Pre-prosthetics surgery. Diagnosis and surgical management
- 9. Oro-antral fistula diagnosis and surgical management with different techniques
- 10. Intraoral cyst enucleation
- 11. Peri-apical surgery
- 12. Odontogenic infection management
- 13. Intraoral biopsy procedures, including needle aspiration, incisional biopsy, and excisional
- 14. Closed reduction of facial bone fractures using arch-bar intermaxillary fixation and IMF Fix screws.
- 15. Closed reduction of TMJ dislocation
- 16. Preparation for Part 1 Examination: At the end of the first year, the candidate prepares

Curriculum for First year (Applied Basic Dental and Medical Sciences)

Applied Head and Neck Anatomy, Oral and General Physiology, Biochemistry, General and Oral Pathology and Microbiology, Pharmacology and Basic medical Statistics.

Course Outcome

The student would be knowledgeable about the followings:

- 1. Development and growth of face, teeth and jaws
- 2. Age changes and evaluation of mandible in detail Congenital abnormality of orofacial regions
- 3. Surgical anatomy of scalp, temple and face
- 4. Anatomy and its applied aspects of triangles of neck and deep structures of the neck
- 5. Cranial facial bones and surrounding soft tissues
- 6. Cranial nerves
- 7. Tongue
- 8. Temporal and infra temporal region
- 9. Tempero mandibular joint in detail
- 10. Orbits and its contents
- 11. Muscles of face and neck
- 12. General consideration of the structure and function of brain and applied anatomy of intracranial venous sinuses
- 13. Cavernous sinus and superior sagittal sinus

- 14. Brief consideration of autonomous nervous system of head and neck
- 15. Functional anatomy of mastication, Deglutition and Speech
- 16. Respiration and circulation
- 17. Histology of skin, oral mucosa, connective tissue, bone, cartilage, cellular elements of blood vessels, Lymphatic, Nerves, Muscles
- 18. Tooth and its surrounding structures
- 19. Cross sectional Anatomy of the head and neck, as applied in CT, MRI Interpretation
- 20. Salivary glands Anatomy, Embryology and Histology

Applied General and oral Physiology

- 1. Body temperature.
- 2. Blood its composition hemostasis, blood dyscrasias and its management, hemorrhage and its control, blood grouping, cross matching, blood component therapy, complications of blood transfusion, blood substitutes
- 3. Digestive system composition and functions of saliva, mastication, deglutition, digestion and taste.
- 4. Respiratory system respiration control of ventilation, anoxia, asphyxia, artificial respiration, hypoxia - type and management
- 5. CVS cardiac cycle, shock, heart sounds, blood pressure, hypertension
- 6. Endocrinology metabolism of calcium, endocrinal activity and disorder relating thyroid gland, parathyroid gland renal gland, pituitary gland, pancreas and gonads.
- 7. Nutrition general principles balanced diet, effect of dietary deficiency, protein malnutrition, nutritional assessment, metabolic responses to stress, energy need for nutritional support, entrails nutrition, roots of access to GIT, parenteral nutrition, access to central veins, nutritional support.
- 8. Fluid and electrolytic balance / acid base metabolism the body fluid compartment, metabolism of water. and electrolytes, factors maintaining hemostasis causes for treatment of acidosis and alkalosis
- 9. Nervous

system Physiology of nerve conduction, pain pathway, sympathetic and parasympathetic nervous system, hypothalamus and mechanism of controlling body temperature

- 10. Applied Physiology of pain
 - a. Components of pain sensation
 - b. Pain pathway
 - c. Orofacial pain

11. Applied Physiology of the eye

Applied Pathology

- Inflammation acute and chronic inflammation, repair and regeneration, 1. necrosis and gangrene and role of component system in acute inflammation, role of arachidonic acid and its metabolites in acute inflammation, growth factors in acute inflammation role of NSAIDS in inflammation, cellular changes in radiation injury and its manifestations.
- Wound management Acquired factors influencing healing, properties of 2. suture
- Materials and appropriate uses of sutures. 3.

- 4. Hemostasis role of endotheliumin, arterial and venous thrombi, and disseminated intravascular coagulation.
- 5. Hypersensitivity shock and pulmonary failure, types of shock, diagnosis, resuscitation, pharmacological support, ARDS and its causes and prevention, ventilation and support
- 6. Neoplasia classification of tumours, carcinogens and carcinogenesis, spread of tumors, characteristics of benign and malignant tumors, grading and staging of tumours various laboratory investigation.
- 7. Chromosomal abnormalities with oro- facial manifestations.
- 8. Basics of immunology primary and secondary.
- 9. Cysts of the jaws

Applied Anatomy (general /Head and Neck):

- 1. Surgical anatomy of the scalp, temple and face
- 2. Anatomy of the triangles of neck and deep structures of the neck
- 3. Cranial and facial bones and its surrounding soft tissues with its applied aspects in maxillofacial injuries.
- 4. Muscles of head and neck
- 5. Chest, lower and upper extremities (in consideration to grafts/flaps in the orofacial area)
- 6. Arterial supply, venous drainage and lymphatics of head and neck
- 7. Congenital abnormalities of the head and neck
- 8. Surgical anatomy of the cranial nerves
- 9. Anatomy of the tongue and its applied aspects
- 10. Surgical anatomy of the temporal and infratemporal regions
- 11. Anatomy and its applied aspects of salivary glands, pharynx, thyroid and parathyroid gland, larynx, trachea, esophagus
- 12. Tooth eruption, morphology and occlusion.
- 13. Surgical anatomy of the nose.
- 14. The structure and function of the brain including surgical anatomy of intra cranial Venous sinuses
- 15. Autonomous nervous system of head and neck
- 16. Functional anatomy of mastication, deglutition, speech, respiration and circulation
- 17. Development of face, paranasal sinuses and associated structures and their anomalies
- 18. TMJ: surgical anatomy and function

Biochemistry:

- 1. General principles governing the various biological activities of the body, such as osmotic pressure, electrolytes, dissociation, oxidation, reductionist.
- 2. General composition of the body Intermediary metabolism
- 3. Carbohydrates, proteins, lipids, and their metabolism
- 4. Nucleoproteins, nucleic acid and nucleotides and their metabolism
- 5. Enzymes, vitamins and minerals
- 6. Hormones
- 7. Body and other fluids.

Pathology:

- 1. Inflammation:
 - Repair and regeneration, necrosis and gangrene
 - Role of component system in acute inflammation
 - Role of arachidonic acid and its metabolites in acute inflammation
 - Growth factors in acute inflammation
 - Role of molecular events in cell growth and intercellular signaling cell surface. receptors
 - Role of NSAIDs in inflammation
- 2. Cellular changes in radiation injury and its manifestation:
 - Haemostasias
 - Role of endothelium in thrombogenesis
 - Arterial and venous thrombi
 - Disseminated Intra vascular coagulation
- 3. Shock:
 - Pathogenesis of hemorrhagic, neurogenic, septic, cardiogenic shock
 - Circulatory disturbances, ischemia, hyperemia, venous congestion, edema, infarction
- 4. Chromosomal abnormalities:
 - Marfans Syndrome, Ehler's Danlos Syndrome, Fragile X-Syndrome
- 5. Hypersensitivity:
 - Anaphylaxis, type 2 hypersensitivity, type 3 hyper sensitivity and cell mediated reaction and its clinical importance, systemic lupus erythematosus.
- 6. Infection and infective granulomas.
 - 7. Neoplasia:
 - Classification of tumors.
 - Carcinogenesis and carcinogens- chemical, viral and microbial
 - Grading and staging of cancers, tumor Angiogenesis, spread of tumors
 - Characteristics of benign and malignant tumors

Oral Pathology:

- 1. Developmental disturbances of oral and Para oral structures
- 2. Regressive changes of teeth.
- 3. Bacterial, viral and mycotic infections of oral cavity
- 4. Dental caries, diseases of pulp and periapical tissues
- 5. Physical and chemical injuries of the oral cavity
- 6. Oral manifestations of metabolic and endocrinal disturbances
- 7. Diseases of jawbones and TMJ
- 8. Diseases of blood and blood forming organs in relation to oral cavity
- 9. Cysts of the oral cavity
- 10. Salivary gland diseases
- 11. Role of laboratory investigations in oral surgery

Microbiology:

- 1. Immunity
- 2. Knowledge of organisms commonly associated with diseases of oral cavity.
- 3. Morphology cultural characteristics of streptococci, staphylococci, pneumococci clostridium group of organisms, spirochetes, organisms of TB, leprosy, diphtheria, actinomycosis and moniliasis
- 4. Hepatitis B and its prophylaxis
- 5. Culture and sensitivity test
- 6. Blood groups, blood matching, RBC and WBC count
- 7. Bleeding and clotting time
- 8. Smears and cultures
- 9. Urine analysis and cultures.

Applied Pharmacology and Therapeutics:

- 1. Definition of terminologies used
- 2. Dosage and mode of administration of drugs.
- 3. Action and fate of drugs in the body
- 4. Drug addiction, tolerance and hypersensitivity reactions.

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- 5. Drugs acting on the CNS
- 6. General and local anesthetics, hypnotics, analeptics, and tranquilizers.
- 7. Chemo therapeutics and antibiotics
- 8. Analgesics and antipyretics
- 9. Antitubercular and antisyphilitic drugs.
- 10. Antiseptics, sialagogues and antisialogogues
- 11. Haematinics
- 12. Antidiabetics
- 13. Vitamins A, B-complex, C, D, E, k

First-Part Exam:

- 1. The trainee has to proceed to the first part exam during the first year in the training program.
- 2. The pass mark is 60%.
- 3. The trainee has the opportunity of four successive repetitions for the first exam, after which they are to be given an additional opportunity provided that they have scored 50% or more in the last try.
- 4. If the trainee does not pass the first part exam, he will continue the training program for the first six months of the second year and submit the second trial if he does not pass the exam, the training program will be stopped until he successfully passes the first part exam and begins with the completion of the training program of the third year.

Suggested Text books

- 1. Clinical anatomy for medical students. Richard Snell byRegions.
- 2. Last anatomy
- 3. Clinical anatomy Kiss Moore.
- 4. Orban's Oral Histology and Embryology, S.N. Bhaskar
- 5. An Atlas of Oral Anatomy, Berkowitz, G.R. Holland
- 6. Wheeler's Dental Anatomy, Physiology and Occlusion

- 7. Guyton and Hall Textbook of Medical Physiology By John E. Hall.
- 8. Ganong; Review of Medical Physiology, 19th edition.
- 9. Text Book of Physiology by AK Jain.
- 10. Berne & Levy Physiology [BERNE & LEVY PHYSIOLOGY 6/E]
- 11. Essentials of Physiology for Dental students K Sembulingam
- 12. Muir's Textbook of Pathology 15th edition
- 13. A text book of oral pathology Shafer, Hine & levy.
- 14. Oral pathology for dental students by Soams & Southam
- 15. McCracken and Cawson, Clinical and Oral Microbiology, McGraw Hill

Year two: Medical subjects Training program

The Trainee performs off-service medical and surgical rotations. Under direct supervision.

The trainees rotate on different services including anesthesiology, internal medicine, general surgery, intensive care, and other electives as follows:

1 month

1 month

1 month

- 1. General Medicine 3 months 3 months
- 2. General Surgery
- Anesthesia including intensive care 2 months 3.
- Ear Nose and Throat 1 months 4.
- 5. Neurosurgerv
- Emergency Medicine 6.
- 7. Orthopedic surgery.

Note:

Plastic and Reconstructive Surgery 2 months 4th year

Medicine Rotation (3 months)

Goals and objectives:

- Training in Art and Techniques of an accurate medical history taking and how Α. to performe physical examination, diagnosis, treatment in patients with a variety of medical conditions
- B. Train to develop experience in identifying and diagnostic tests, interpreting the results of these tests, and developing treatment strategies based on the interpreted results/diagnosis.
- C. Learn and develop basic experience in anticoagulation management in anticoagulation management
- D. Learning the body fluid management
- Learning the principles of diabetic and cardiac management E.

Trainee duties and training in Medicine:

- Full-time commitment to the rotation a.
- b. First on-call duties
- Recording admission history and performing physical examination, C. participating in the diagnosis and comprehensive management of the patients.
- Participating in daily ward rounds, out-patients consultation clinics and d. attending seminars in the department of medicine with main emphasis on:
 - Endocrine disorders with concentrations on
 - Diabetes

- Thyroid, parathyroids disorders
- Hematology disorders
- Gastro intestinal disorders
- Liver disorders
- Chest disorders: bronchial asthma, chronic, Obstructive airway
- TB, pneumonia.
- Cardiology:
- General principles of examination and diagnosis of the heart and cardiovascular system
- Disorders such as Arrythmia, Angina, Myocardial infraction.
- Neurology:
- General principles of examinations and diagnosis of neurological disorders cases with emphasis on:
- Examinations of cranial nerves
- Dermatology

General Surgery (3 months)

Goals and Objectives:

Observe and experience in pre-operative evaluation of the surgery patient with emphasis on:

- 1. Fluid and electrolyte balance
- 2. Cardiovascular function
- 3. Pulmonary care
- 4. Surgical principles of different types of wound care
 - 5. Observe assist in the techniques in the followings
 - a. Insertion chest tube.
 - b. Central line and parental nutrition.
 - c. Urinary catheter

Trainee duties and training:

- 1. Full-time commitment to the department of general surgery during this period with sharing the responsibilities with surgical staff
- 2. Performs medical history, and carries out physical examination in both routine general surgery cases.
- 3. Learn with the resident surgeon perioperative and post management of patients.
- 4. Attending as an assistant in surgery performed with surgical staff.

Anesthesia and ICU Rotation (2 months):

Goals and objectives:

- a. Full responsibility as an anesthesia resident including receiving training in:
 - 1. Pre-anesthesia patient's assessment
 - 2. Intubation and extubation techniques, and drug administration
 - 3. Life parameters monitoring devices and equipment, resuscitative procedures, and postoperative assessment and management

- b. Anesthesia emergencies through cardiopulmonary resuscitation (CPR), airway maintenance
 - 1. Review basic pulmonary and cardiovascular physiology in dynamic situations
 - 2. Drugs used in intravenous sedation
 - 3. Learn standard induction and intubation techniques, with use of fibrooptics in cases of Temporomandibular joint ankylosis.

Trainees' duties and training:

- 1. Shares on-call duties on a regular basis with the other anesthesia residents
- 2. Intra-operative management of patient under general anesthetics
- 3. Be able to interpreting chest x-ray, electrocardiogram (ECG) for anesthesia purposes.

ENT, Head and neck surgery (one month)

Goals and Objectives:

- a. Diagnosis and surgical treatment of benign and malignant lesions of the head and neck, paranasal sinuses, and neck dissections.
- b. Observe, assist and learn how to do fiber optic nasopharyngeal and hypopharyngeal examination
- c. Observe and perform elective and emergency tracheostomies and its care.
- d. Involve in management of Emergency cases
 - Resident duties and training:
 - Full-time commitment to the rotation including first on call duties with ENT staff in charge.

Emergency Medicine (one month)

Goals and objectives:

- 1. Perform a focused emergency physical examination
- 2. Diagnose and treat medical and surgical emergencies
- 3. Observe and assist in Management of acutely ill patients
- 4. Help and perform and interpret laboratory data and electrocardiograms with medical resident in charge.

The trainee duties and training program:

- 1. Full-time commitment to the rotation with medical resident
- 2. Management of medical complications, including acute asthma cases and diabetic ketoacidosis.

Certificate of Emergency Medicine in the rotating hospital by the Arab board member in charge of the training.

Neurosurgery (one month)

Goals and objectives:

- a. learn how to do a neurological examination
- b. Involve in assessment and management of acute neurology injuries including head injury
- c. Learn how to read and interpret cervical spine fluid measurements, CT scan, MRI, and angiography and diagnose intra-cranial lesions

Resident duties and training:

- a. Be first on-call and functions with a junior neurosurgery resident
- b. Observe and learn principles of treatment of intracranial hemorrhage (subarachnoid, epidural, subdural)
- c. Training supervision and evaluation of end rotation is accomplished by the program director of Arab board Specialty Certificate of Neurosurgery at the rotating hospital.

Intensive care unit Rotation (one month):

Goals and objectives:

- a. Observe and learn how to manage Manage complex post-surgical care cases.
- b. Develop skills in insertion of central venous access lines
- c. Gain experience in the principles of management of the acutely-ill patient

Resident duties and training:

Involve in full duties with and as a junior surgery resident of neurosurgery.

Orthopedic surgery (one month)

Goals and objectives:

- 1. Perform a focused emergency physical examination of orthopedic cases received in emergency department with the residents of orthopedics
- 2. Learn how to Diagnose and treat various fractured cases
- 3. Observe and assist in Management of surgical and non-surgical various orthopedic cases including arthroscopy
- 4. Help and Perform and interpret radiographs, CT scan and MRI of orthopedic and joint disorders

The trainee duties and training program:

- 1. Full-time commitment to the rotation with orthopedic resident
- 2. Follow up the cases operated with the orthopedic resident

Year 3- Oral and Maxillofacial surgery Subjects Training

Goals and Objectives:

Evaluate and manage preoperative patients with a broad range of surgical problems Manage patients with various medical and surgical problems, especially as they pertain to Diagnosis and treatment of Oral and Maxillofacial cases of the following procedures under direct supervision.

Procedures:

Dental and Maxillofacial implant Removal of salivary duct calculi, mucocele excision Pre-prosthetic surgery: Ridge reconstruction Mandibular fracture open reduction and fixation with plate and screws Maxillary fracture open reduction and fixation with plate and screws Closed reduction of zygomatic fracture

Year 4 - Oral and Maxillofacial surgery training 10months + two months Plastic and Reconstructive Surgery

Goals and Objectives

- a. Evaluate and manage patients with a broad range of surgical problems from the preoperative to the postoperative phases of illness
- b. Manage surgical patients and perform procedures under direct or indirect supervision.

Procedures

Extra-oral reduction and fixation of facial bone fractures

Surgical excision of benign odontogenic and non-odontogenic tumors of the jaws Orthognathic surgery (including the maxilla, mandible, and chin) Distraction osteogenesis

Cleft palate and alveolar bone graft

Harvesting bone graft

Temporomandibular joint disorder (TMJ) non invasive surgery

- c. Involve in bedside and tutorials teaching the principles of patient management to junior residents.
- d. Obtain informed consent from patients (this includes explaining the procedures to be performed as well as all the alternatives and potential risks and benefits)

Plastic and reconstructive Surgery (two months)

Goals and objectives:

- a) Management of soft tissue injuries of the face.
- b) Provide management of wound care and wound healing of head and neck area.
- c) diagnosis and treatment of congenital lesions of the lips, palate, and nasal area

e) Involve in assessment and in re-anastomosis techniques

f) Assist and develop skills in management of extremity injury and microsurgical techniques

g) Observe ,assist and Perform cosmetic and aesthetic surgery procedures in the maxillofacial region, rhinoplasty, blepharoplasty, face lifting genioplasty, lipectomy, otoplasty, osmotic surgery, skin grafts ,free flaps and scar managements

Resident duties and training:

a) Full-time commitment to the rotation.

b) Take first on-call duties with the full responsibilities under care of plastic surgery resident, directly .

Years 5- Oral and Maxillofacial surgery

Goals and Objectives

- a. Evaluate and manage patients with a broad range of surgical problems including preoperative and post-operative care.
- b. Manage surgical patients and perform procedures under indirect supervision as possible:

Procedures:

Temporomandibular joint (TMJ) surgery:

Condylar excision, fixation, and reconstruction

Cleft lip or palate repair and alveolar bone graft

Upper or lower jaw resection

Maxillofacial pathology, benign and malignant tumors

Excision of salivary gland (superficial parotidectomy, submandibular, sublingual, lips and palate)

- c. Teach principles of patient management to junior residents
- d. Directly manage the care of critically-ill or injured patients
- e. Have the level of knowledge and technical skills necessary to ensure successfully pass the final part of the Arab Board in OMS.

Second (Final) Part Exam:

The following is required to enter the written final exam:

- 1. The trainee must have completed the five years of training in centers recognized by the scientific council.
- 2. The trainee is evaluated by the training supervisor satisfactorily, and confidentially and has to pass the local annual evaluation.
- 3. The trainee Log Book must conform to the council's previously mentioned requirements.
- 4. The passing grade is 60 %.
 - 5.Clinical examination components:
 - a. OSCE
 - b. Multiple Case Scenario
 - c. Viva

Suggested Text Books

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- Maxillofacial Trauma & reconstruction- Peter Ward booth
- Maxillofacial Injuries Row & Williams Vol.1 & 2
- Text book of Oral & Maxillofacial Surgery Laskin Vol. 1 & 2
- Text book of Oral & Maxillofacial Surgery Peter Ward booth Vol.1 & 2
- Principles of Oral & Maxillofacial Surgery Peterson Vol. 1 & 2
- Oral Maxillofacial Trauma Fonseca Vol. 1 &2 4th Edition
- Maxillofacial Infections Topazian
- Oral Cancer- McGregor
- WHO Classification of Head and Neck Tumours 4th Edition, Volume 9
- Minor Oral Surgery G.L. Howe
- Extraction of teeth- G.I. Howe
- Local anesthesia Malamed
- Distraction Osteogenesis- McCarthy
- Essentials of Orthognathic Surgery. Third Edition by Johan Reyneke
- Controversies in Oral & Maxillofacial Surgery
- Plastic Surgery- Mathes Vol. 1 to 5
- Oral Oncology J.PJ.ain
- Text book of Oral & Maxillofacial Surgery Fonseca Vol. 1 to 7
- Text book of Preprosthetic Surgery Starshack
- Dentofacial deformities Bell Vol.1 & 3
- Facial esthetics & Dentofacial deformities Epker Vol 1 to 4
- Principles of Oral & Maxillofacial Surgery Moore
- Complications of Oral & Maxillofacial Surgery Kaban
- Current advances in Oral & Maxillofacial Surgery Irby & Shellon

Suggested Periodicals

- International Journal of Oral & Maxillofacial Surgery
- Journal of Cranio Maxillofacial Surgery
- British Journal of Oral & Maxillofacial Surgery
- Journal of Cranio-Maxillofacial surgery
- Oral medicine, Oral surgery, Oral pathology, Oral Radiology
- Journal of Oral Medicine and pain

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- Plastic & Reconstructive Surgery Journal of American Dental Association •
- Australian Dental Journal
- •
- Oral Oncology British Dental Journal

