Goals and Objectives for the Otolaryngology-Head & Neck Resident on the Oral and Maxillofacial Surgery (OMFS) Rotation

Hamilton Health Sciences (1 four-week rotational block)
Revised March 26, 2013

During the second year of the Surgical Foundations Program the resident will spend 1 four-week block on the Oral and Maxillofacial service. The resident will gain experience in dealing with outpatients in the Surgeon’s private clinic and with inpatients on the wards, the operating room and in the emergency department of Hamilton Health Sciences.

Staff Surgeons: Dr. E M G Dore and Dr. B E Harnett

Private Office: 26 Legend Court, Ancaster, 905-304-6115

Schedule of the week: Monday OR at MUMC at 8:00
Wednesday and Thursday: Occasional OR day at MUMC, HGH and The Juravinski Hospital
Other days of the week: clinical days at the private office

Call:

The resident will be assigned to be on call with the Oral and Maxillofacial service. During call, on some occasions the resident will also cover call with the Otolaryngology service at Hamilton Health Sciences. The priority call will always be with the Oral and Maxillofacial service. There will be a resident on 2nd call for the Otolaryngology service in the event that the Oral and Maxillofacial resident is unable to attend the Otolaryngology call. Call will be set according to PAIRO guidelines.

Overall Objectives:

It is recognized that the resident may not be exposed to all elements of these objectives; however at the conclusion of the rotation the resident should demonstrate knowledge or competency in the following:

The resident is expected to gain understanding and knowledge of the anatomy, physiology and pathophysiology of the oral cavity and the facial bones in particular the maxilla and the mandible. The resident will gain experience in the medical and surgical treatment of trauma and diseases of the maxilla, the mandible and the oral cavity.

Specific Objectives:

Medical Expert

The resident is expected to learn how to:
Take a relevant history of patients in the OMFS clinic and of patients seen with a maxillofacial trauma. 
Conduct a dental and oral cavity examination. 
Conduct an examination of a patient with a maxillofacial trauma. 
Order and review appropriate investigations such as plain radiographs, panorex, CT scan, MRI, cephalograms and biopsies. 
Formulate a diagnostic work-up and treatment plan for the patient in collaboration with the appropriate subspecialties such as dentists, orthodontists, plastic surgeons and otolaryngologist-head and neck surgeons. 
Carry out pre and post-op care. 
Perform local anesthetic blocks. 
Recognize complications of treatment and their management. 

Knowledge Basic sciences and anatomy:

Understand the anatomy of the facial skeleton, dentition, the oral cavity and the associated soft tissue structures. 
Understand the growth and development of the facial skeleton from the stages of embryology to adult. 
Describe the classification of dental occlusion and evaluate the harmonious arrangement of the jaws, teeth with respect of the facial appearance and function. 
Understand the principles of facial bone healing. 

Knowledge Clinical:

1. Principles of management of a Maxillofacial Trauma including:

   -Securing the airway. 
   -Ensuring and confirming adequate breathing as it relates to Maxillofacial Trauma. 
   -Management of bleeding as it relates to Maxillofacial Trauma. 
   -Learning the different surgical approaches (open/closed reduction with internal/external fixation) to facial fractures in particular the maxilla and the mandible. 
   -Physiotherapy for the patients following injuries to the mandible, TMJ pathology. 
   -Complications of facial trauma and its management. 

2. Principles of management and evaluation of patients having orthognathic surgery: 

   -Collaboration with subspecialties such as dentists, orthodontists and oral surgeons. 
   -Knowledge of the LeFort and mandibular osteotomies, genioplasty.
3. Principle of distraction osteogenesis:

- Understand the indication of the application of a distracter.

4. Describe the pathophysiology, diagnosis and treatment of benign and malignant tumors of the maxilla and the mandible and other diseases such as:

Benign Neoplasms

Odontogenic Neoplasms
- ameloblastoma
- odontoma
- adenomatoid odontogenic tumor
- ameloblastic fibroma
- odontogenic myxoma
- odontogenic fibroma
- cementoma

Osteomas:
- tori mandibularis, palatinus and exostosis
- fibroosteoma (ossifying fibroma)

- benign giant cell neoplasm

Odontogenic Cysts:
- radicular cyst
- dentigerous (follicular) cyst
- keratocyst
- eruption cyst
- primordial cyst
- calcifying odontogenic cyst

Non odontogenic cysts:
- nasopalatine duct cyst (incisive canal cyst)
- globulomaxillary (premaxilla-maxillary) cyst
- nasoalveolar (nasolabial) cyst
- median mandibular cyst
- median palatal cyst

Malignant Neoplasms
- chondrosarcoma
- osteosarcoma
- Ewing’s sarcoma
- metastatic carcinoma
Others:
- temporomandibular joint disorders
- fibrous dysplasia
- metabolic and genetic jaw diseases
- acute and chronic osteomyelitis
- acromegaly
- cherubism
- hyperparathyroidism
- Paget’s disease

**Technical and Operative skills:**

- Usage of basic dental instruments (mirror, elevator, forceps, drill).
- Extraction of teeth.
- Performance of local anesthetic nerve blocks.
- Take dental impressions, pouring and mounting of models.
- Assisting/application of the arch bars, ivy loops and maxillomandibular fixation (MMF).
- Assisting/application of plating systems.
- Perform or assist with maxilla and mandible fractures reduction (closed/opened) with internal or external fixation.
- Assisting/performance of LeFort and mandibular osteotomies and genioplasties.
- Assisting/performance of distraction osteogenesis with osteotomies and application of the distractor.
- Assisting/performance of alveolar bone grafting.
- Assisting/reduction of condyle dislocation.

**Communicator**

Take a relevant history from the patient and/or the family.
Discuss with the patient and/or family the diagnosis, investigations, treatment and potential complications/morbidities with appropriate empathy.
Obtain an informed consent for treatment from the patient and/or family.
Communicate effectively with health care professionals.
Dictate/write consultations, OR reports, progress notes and discharge summaries clearly.
Listen effectively.
Present and participate at grand rounds.

**Collaborator**

Consult and interact with respect to other health care professionals, in particular dentists, orthodontists, dental assistants, dental hygienists, nurses, physicians and surgeons.
Consults and works effectively with other medical specialists.
Consults and works effectively with colleagues.
Manager

Manage effectively the different tasks involved in the diagnosis and treatment of maxillofacial problems.
Supervise team, delegate tasks and prioritize responsibilities.
Utilize health care resources safely and effectively.
Utilize information technology effectively.
Work well in the health care organization (OMFS clinic and operative room).
Keep a log of your surgical procedures.

Health Advocate

Awareness of the health and preventive measures related to maxilla and mandible trauma/fractures, TMJ and oral cavity diseases.
Advocate on behalf of patients.

Scholar

Prepare and read around surgical cases and learn the steps of the proposed treatment.
Read about clinical cases and participate appropriately by asking questions.
Teach medical students, more junior residents or other health care professionals.
Participate in academic rounds.
Accept constructive feedback and act appropriately.
Evaluate proposed diagnosis and treatment with current literature when appropriate.

Professional

Deliver health care to patients in an honest, ethical and professional manner.
Recognize own limitations and seek advice and help when needed.
Seek out and act on constructive criticism.
Pursue a balanced life-style.

Bibliography suggestions

Abubaker A Omer: Oral and Maxillofacial Surgery Secrets. 2nd edition
Bagher Shahrokh C, Jo Chris: Clinical Review of Oral and Maxillofacial Surgery
Plastic Residency Teaching Seminars copies