Goals and Objectives for the Otolaryngology-Head & Neck Surgery Rotation

Pediatric Focus

Resident PGY2

Hamilton Health Sciences (4 four-week rotational blocks)

Overview

During the second year of their residency training the resident will spend 4 four-week blocks on rotation at Hamilton Health Sciences. The resident will gain experience in dealing with outpatients in the clinic and with inpatients on the wards, the intensive care units, the operating room and in the emergency department. The Otolaryngology service at McMaster Hospital involves a significant amount of pediatric practice, in addition to adult practice and the Hamilton General and Juravinski Hospitals involve an adult practice only. All residents must review their learning objectives with the Otolaryngology staff at the beginning and at the end of the rotation to facilitate meeting the objectives.

Otolaryngology Staff Surgeons: Drs B. Korman, R. Lemckert, J. MacLean, D. Reid and D Sommer.

Schedule of the week: Varies weekly; need to verify – posted at McMaster and HGH clinic sites at least one month in advance.

You will be expected to make rounds with your team in the mornings before starting in the operating room or other activities of the service and at the end of the day. You are expected to make handover to the resident on call. The Chief resident will assign the schedule of the week for the team. If the Chief resident is absent, he/she will delegate the resident with most seniority to that role temporarily.

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Please note that HGH clinic runs three days per week, which are variable
OR (skull base) this time is variable
Call:
You will be assigned to be on call with the Otolaryngology service. The Chief resident will make up your call schedule. Please note that call during weekdays is from 08:00 to 08:00 hrs and weekend call is from Friday 17:00 to Monday 08:00 hrs unless notified differently. Call will be set according to PARO 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:*

Pediatric Otolaryngology is to be the primary focus during this rotation. The resident is expected to gain understanding and knowledge of more advanced General Otolaryngology; they will also be introduced to otology surgery, rhinology and laryngology. Upon completion of the PGY 2 year, the resident will have attained adequate skills and knowledge to diagnose and manage common and some advanced Pediatric Otolaryngology pathology.

**Specific Objectives:**

**Medical Expert**

The resident is expected to learn how to:

Continue improvement in skills in clinical history taking and examination of the pediatric otolaryngology patient using basic office instrumentation and office (flexible and rigid) endoscopes and microscope equipment.

Continue improvement in knowledge in the indications for and interpretation of diagnostic imaging techniques of the head and neck.

A thorough knowledge in advanced audiology testing and treatment strategies.

Synthesize all the information and formulate a diagnostic work-up and treatment plan for common and some advanced otolaryngology problems.

Carry out pre and post-op care on the ward and the clinic.

Obtain efficient follow-up skills related to disease monitoring, compliance with treatment Recognize common complications of treatment and their management.
**Knowledge Basic sciences and anatomy:**

Understand better the basic anatomy, development and physiology of the ear, nose, paranasal sinuses, upper aero digestive tract, thyroid/parathyroid glands, and neck.

**Knowledge clinical:**

1. Principles of evaluation and management of Pediatric Otolaryngology patients to include congenital, infectious/inflammatory, neoplastic and other acquired disorders of the ears nose and throat and upper aero digestive tract:

   - Acute airway obstructions in NICU, PICU, ER.
   - Stridor in neonates and infants.
   - Foreign body upper aero digestive tract.
   - Caustic ingestion/burns.
   - Common congenital anomalies: craniofacial, choanal atresia, branchial cleft, thyroglossal cyst, TEF etc.
   - Hearing loss all etiologies and common syndromes.
   - Cochlear implants selection and indication.
   - Chronic otitis media.
   - Acute otitis media with complications.
   - Serous otitis media.
   - Cholesteatoma congenital and acquired.
   - Head and neck neoplasms benign and malignant.
   - Congenital nasal anomalies: stenosis/atresia nostril, choanal atresia, dermoid cyst, glioma, meningoencephalocele …
   - Acute sinusitis with complications.

2. Principles of evaluation and management in General Otolaryngology including:

   - Acute upper airway obstructions.
   - Head and neck trauma (blunt, penetration) awareness.
   - Epistaxis.
   - Upper aero digestive diseases: (see also Rhinology and Laryngology).

   Inflammatory and infections: laryngitis, epiglottitis, tracheitis, laryngotracheobronchitis, angioedema, obstructive sleep apnea, pharyngotonsillitis, aphthous, glossitis, stomatitis, herpetic oropharynx lesions, oral-pharynx-esophageal candidiasis.

   - Salivary glands diseases/disorders:
Congenital: cyst/fistula of first branchial arch, hemangioma and lymphangioma.
Sialorrhea.

Principles of surgery of salivary glands dissection planes, finding the facial main trunk and branches, lingual and hypoglossal nerves, abscess incision and drainage, awareness.
Radiology characteristics related to certain salivary gland pathology such as sialolithiasis, sialadenitis, Sjogren’s, duct stricture and blockage, neoplasm location /malignancy signs, awareness.

3. Principles of evaluation and management of patients in Otology:

- Temporal bone trauma/fracture, awareness.
- Other ear trauma: perforation TM, barotraumas.
- External otitis: bacterial, fungal.
- Malignant external otitis awareness.
- Otitis media: acute, serous, and chronic awareness of complications.
- Hearing loss classifications.
- Mastoiditis: acute and chronic.
- Cholesteatoma awareness.
- Rehabilitation of hearing loss: hearing aids, implants and other hearing devices.

4. Principles of evaluation and management of Pediatric Rhinology disorders:

- Congenital anomalies: stenosis/atresia nostril, choanal atresia, dermoid cyst, glioma, meningoencephalocele
- Nasal obstruction differential diagnosis.
- Rhinitis all types (allergic, vasomotor, sicca, infectious, atrophic, hypertrophic, medicamentosa).
- Nasal/sinus polyps differential diagnosis (inflammatory, cystic fibrosis), juvenile nasopharyngeal angiofibroma.
- Sinusitis: acute, chronic.
- Sinusitis fungal local and invasive awareness.
- Nasal neoplasms.
- CSF leak awareness.
- Trauma: nasal bone.

5. Principles of evaluation and management of Pediatric Laryngology:

- Language development.
- Laryngomalacia.
- Laryngopharyngeal reflux.
-Laryngeal cysts/other congenital anomalies.
-Recurrence respiratory papillomatosis.
-Subglottic stenosis.
-Tracheostomy.
-Vocal cord nodules.
-Vocal paralysis.

**Technical and Operative skills:**

1. Pediatric:

-Myringotomy and tubes placement improve skill and rapidity of execution.
-Adenotonsillectomy needs to improve skill and rapidity of execution.
-Perform flexible nasopharyngolaryngoscopy in neonates, infants and children.
-Perform rigid esophagoscopy diagnostic, with removal of foreign body with assistance.
-Direct laryngoscopy/bronchoscopy diagnostic, removal foreign body with assistance.
-Thyroglossal cyst removal (sistrunk) with assistance.
-Branchial cleft cyst removal with assistance.
-Drainage retropharyngeal abscess and other deep neck space infections.
-Soft tissue handling/suturing.
-Excision of ranula with assistance.

2. General Otolaryngology:

-Tracheostomy: percutaneous /opened with assistance.
-OSAS: tonsillectomy, uvulopalatopharyngoplasty with assistance.
-Biopsy/FNA neck lymphatic node.

3. Otology:

-Harvesting graft temporalis fascia, perichondrium, cartilage with assistance.
-Tympanomastoidectomy observation.

4. Rhinology:

-Rigid, flexible nasal sinus endoscopy.
-Biopsy nasal cavity.
-Endoscopic sinus surgery nasal polypectomy, uncincetomy, anterior ethmoidectomy, maxillary sinusotomy observation.
-Drainage of subperiostal orbital abscess external/ endoscopic approach observation.
-External approach to sinuses: ethmoidectomy, frontal trephination, frontal sinus osteoplasty observation.
-Setting up the image system guidance.
5. Laryngology:

-Microlaryngoscopy and biopsy, excision lesion with CO2 laser/debrider with supervision.

**Communicator**

Develop skills in communication with the pediatric patient by having good interaction and communication that are age-appropriate.
Develop skills in communication with their family.
Take a relevant detailed history from the patient, and their family.
Discuss with the patient and/or family the diagnosis, investigations, treatment and potential complications/morbidities.
Discuss and deal with patient’s concerns and complaints appropriately.
Deal with unfavorable outcome or unrealistic expectations.
Obtain an informed consent for treatment from the patient and/or family on common pediatric and adult procedures.
Communicate effectively with healthcare professionals and other members of the team.
Dictate/write consultations, OR reports, progress notes and discharge summaries clearly.
Listen effectively.
Participate and present at grand rounds.

**Collaborator**

Consult and interact with respect to other healthcare professionals, in particular with the pediatricians, anesthesiologists, nurses, respiratory technicians, audiologists, speech language pathologists, occupational therapists and clerks in the outpatient clinics.
Consult and work effectively with the attending staff.
Consults and works effectively with other medical/pediatric specialists.
Consults and works effectively with colleagues, medical clerks and students.

**Manager**

Manage effectively the different tasks involved in the diagnosis and treatment of outpatients and inpatients.
Prioritize responsibilities.
Utilize healthcare resources safely and effectively.
Utilize information technology effectively.
Work well in the healthcare organizations (clinic, ward, ICU, ER and operating room).
Keep a log of your surgical procedures.
Health Advocate

Awareness of the health and preventive measures related to foreign body ingestion in children, recreational noise exposure, voice abusive behaviors, environmental allergens exposure, trauma in recreational activities, sports, helmet safety, smoking and alcohol consumption as a health risk.
Identify and counsel patients and family of risk factors for otitis media and patients at risk of speech delay.
Identify patients at risk of learning difficulty related to hearing impairment and help with the appropriate interventions.
Attention to issues related to public safety/policies.
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, junior and other health care professionals.
Participate in academic rounds, journal clubs, teachings sessions and other educational outlets.
Accept constructive feedback and act appropriately.
Evaluate proposed diagnosis and treatment with current literature when appropriate.
Be alert for opportunities to contribute in the report of cases of mutual interest to audiologists, speech language pathologists, pediatricians, intensive care physicians, neurosurgeons, plastic surgeons and fellow colleagues.
Obtain a satisfactory performance at the residency program oral/written examinations.
Obtain a satisfactory performance at the Canadian in training exam.

Professional

Deliver health care to patients in an honest, ethical and professional manner.
Recognize own limitations and seek advice and help when needed.
You will have the opportunity to explore ethical issues such as informed consent and potential complications of treatments, among many others.
Continue to pursue a balanced life-style.

Bibliography suggestions

Bluestone/Stool: Pediatric Otolaryngology
Byron J Bailey: Head & Neck Surgery-Otolaryngology
Cummings: Otolaryngology-Head and Neck Surgery
Moore Keith: The Developing Human, embryology at McMaster library