SRI RAMACHANDRA MEDICAL CENTRE

Porur, Chennai – 600 116.

DEPARTMENT OF ENT, HEAD AND NECK SURGERY

REGULATIONS AND SYLLABUS FOR

POST DOCTORAL CERTIFICATE COURSE

IN ENDOSCOPIC RHINOLOGY
I. COURSE OFFERED:

Post doctoral Post graduate Certificate course in Endoscopic Rhinology.

II. INTRODUCTION AND RELEVANCE:

The Department of ENT, Head and Neck Surgery has been an integral part of the Institution since its inception and has been modernized with the ever growing demands of the specialty. The Department is equipped with the latest Hi tech equipments like KTP 532 laser system, Nasal Endoscopes with HD cameras, nerve monitor, microdebrider system, Zeiss operating microscope etc.

Modern instruments further unravelled the mysteries of the pathophysiology of the paranasal sinuses. Over the last 30 years, tremendous technological advances in illumination and optics combined with electronic and digital imaging, has opened a new sub specialty of Rhinology in the form of endoscopic sinus surgery. The application of endoscopic techniques into neurosurgery has added a new dimension to the armamentarium with endoscopic skull base procedures as a distinct entity. Such a specialised field of surgery that demands high precision surgical skills needs to be nurtured with intense training. Due to demands on time during the post graduate training program, this need is not fully met. Therefore, this fellowship program is aimed to fill this lacuna, and provide the much needed impetus in this surgical sub speciality.
OBJECTIVES OF THE COURSE

A fellow at the end of six months should acquire the following:

1. **Cognitive knowledge**: Describe embryology, applied anatomy, physiology, pathology, clinical features, diagnostic procedures and the therapeutics including preventive methods (medical/surgical) pertaining to Rhinology. An indepth knowledge of the advanced instrumentation used in endoscopic rhinology is mandatory.

2. **Clinical decision making ability & management expertise**: Diagnose conditions from history taking, clinical evaluation and investigations, should develop expertise to manage medically as well as surgically, diseases of nose and paranasal sinuses as follows:

   Should be able to diagnose and manage Nose and paranasal sinus conditions such as infection, polyps, allergy and tumours.. Acquire adequate surgical skills in functional endoscopic sinus surgery (FESS) and its variations thereof in various disease states. Familiarize and gain hands on experience in use of powered instrumentation and lasers in Endoscopic sinus surgery. Gain exposure to various skull base procedures done endoscopically.

3. **Teaching**: Acquire ability to teach Undergraduate and postgraduate students in simple and straight forward language about the common ENT ailments/disorders & especially about application of endoscopic techniques in their diagnosis and treatment.

4. **Patient doctor relation**: Develop ability to communicate with the patient and his/her relatives, pertaining to the disease condition, its severity and options available for the treatment/therapy.
5. Preventive Aspect: Acquire recent knowledge about prevention of conditions in the nose and paranasal sinus infections, polyposis along with their immunological basis, of tumor aetiopathogenesis. Hence he/she should know about preventive Rhinology.

6. Presentation of Seminar/paper: Should develop public speaking ability and should be able to make presentation on disease-conditions/research topics to fellow colleagues in a Seminar/meeting / conference using audiovisual aids.

7. Research writing: Should be capable of writing case-reports and research papers for publication in scientific indexed journals both nationally and internationally.

8. Research: Develop ability to conduct a research enquiry on clinical materials available in the Hospital and in the community.

9. Team work: Team spirit in patient management, working together in OPD, OT, ward and sharing responsibility with colleagues such as doctors, nurses and other staff are essential. Fellow has to develop these attributes through different mechanisms of interaction.

As a Fellow the role will be different from that of a postgraduate. The expectation is that the Fellow will assume a more supervisory and junior consultant role. This involves teaching postgraduates, reviewing patients with them including high risk patients. The Assistant Professor will be always available on call, as will be the Consultant.

III. ELIGIBILITY CRITERIA:

M.S. DNB (ENT) or equivalent qualification recognized by the Medical Council of India.

IV. DURATION OF COURSE:

   Six Months.

   Number of candidates: 1 per session.

V. Course Fee:

   Rs 2, 50,000/- payable at the time of admission.
VI. STIPEND
Rs. 25,000/- per month.

VII. COURSE REQUIREMENTS:

i. **Maintenance of Log Book:** Each candidate should maintain the record of skills he/she has acquired during the training process.

ii. **Teaching and Academics:** He/she is required to participate in teaching programme including seminars, journal club, group discussions, clinical and clinico-pathological conferences.

iii. Candidate will be encouraged to present papers in conferences and journals.

iv. **Clinical Work:** Fellows will also be second on call emergencies at least 4 times per month.

**Team work:** He/she should be capable of working as a team member. He/she should develop a humane approach to patient care with ability to communicate with the patient’s relatives especially in an emergency situation while dealing with cancer patients and victims of accidents. He/she should also maintain human values with ethical consideration.

**SYLLABUS**

**SPECIALISED KNOWLEDGE - the fellow will be expected to have in-depth knowledge in the following areas:**

**BASIC SCIENCES:**

1. Endoscopic anatomy of the Nose and Para nasal Sinuses.

2. Physiology of Nose and Para nasal Sinuses.

3. Pathophysiology of Para nasal sinuses in Flight and Diving.

4. Mouth and Related Facio-Maxillary Structure
5. Anatomy of Nasopharynx
6. Anatomy and physiology of the Eustachian tube
7. Physiology of Respiration.
8. Surgical Anatomy of Skull Base.
10. Imaging and Radiology.
11. Basic Immunology.
12. Microbiology in ENT & Head, Neck Diseases.
13. Cell Biology
17. Wound Healing.
20. Medical Negligence in Otorhinolaryngology.
21. Use of Nasal Endoscope and its maintainance

RHINOLOGY:

1. Examination of Nose including Diagnostic nasal endoscopy
2. Conditions of the External Nose.
3. Congenital Anomalies of the Nose.
5. Abnormalities of Smell.
7. Food Allergy & Tolerance.
8. Infective Rhinitis & Sinusitis.
13. Principles of Endoscopic sinus surgery
15. Cerebrospinal Fluid Rhinorrhea.
16. The Upper Airway & its relation to the respiratory system.
17. Fracture of Facial Skeleton.
18. Endoscopic septorhinoplasty.
20. Snoring & Sleep Apnoea.
21. Non healing Granulomas of nose
22. Facial Pain & Headache.
23. Aspects of Dental disease in rhinology.
24. Trans-Sphenoidal Hypophysectomy.
25. The Orbit.

PAEDIATRIC RHINOLOGY:

1. Foreign Bodies in the Nose.
2. Congenital Abnormalities of the Nose.
3. Craniofacial Anomalies.


5. Tonsils & Adenoids.

6. Dental development, Orthodontics, Cleft lip & Cleft palate.

7. Sleep Apnoea.

8. Stertor & Stridor.


10. Paediatric Anaesthesia.

iv. SKILLS – the trainee will be expected to have acquired skills in the following domains:

A. CLINICAL SKILLS

i. Counselling & communication
   - Diagnose and co ordinate in the management of endoscopically manageable lesions.
   - Be proficient in the use of nasal endoscope in surgeries of the nose and paranasal sinus including use of powered instruments and lasers
   - Familiarize with the extended use of endoscope in treating conditions of the skull base and the orbit and other advanced image guided systems in use for endoscopic surgery.
   - Be able to optimise treatment goals and achieve the objectives of treatment.
   - Eventually he should be acquire the following surgical skills
     Uncinectomy and infundibulotomy, middle meatal antrostomy
     Dissection of frontal recess
     Anterior and posterior ethmoidectomy
     Approaches to sphenoid sinus
B. DIAGNOSTIC SKILLS

- Perform diagnostic endoscopy in the clinical setting and diagnose sino nasal diseases with ease

Radiology

- Interpretation of x rays, CT scans, MRI scans
- Interpretation of CT angiography, DSA and other interventional procedures

Laboratory medicine

- Ordering and interpreting common investigations.
- Liaison for special investigations like serum markers

Microbiology

- Common bacteriological implications in sinus diseases.
- Role of investigation, interpretation of clinical and laboratory information.
- Investigation of suspected fungal infection.

C. TECHNICAL SKILLS

Understanding mechanics and electrical functions of powered instruments along with the knowledge of their proper use and maintenance.

D. MANAGEMENT SKILLS

The fellow will be expected to have received training or experience in the following areas and to have been involved as a participant in the management of rhinological cases.

I. Personnel

- Training in personnel management.
- Organizational skills, duty rosters etc.
• Awareness of current medical manpower regulations and nurse staffing issues.

ii. Audit

• Data capture and collation, including national and local statistics and preparation of annual reports.
• Assessment of performance; benchmarking.
• Risk management and clinical governance.
• Assessment of equipment and resource.

iii. Assist and contribute actively in the conduct of CMEs, surgical and cadaveric workshops

II. ACADEMIC SKILLS:

A. Teaching

i. Formal training in teaching methodology.

ii. Experience in postgraduate teaching, including working in different teaching media (lecture, seminar, interactive tutorial).

iii. Experience and willingness to undertake undergraduate medical teaching and nurse education.

iv. Development of teaching materials and organization of teaching courses.

v. Involvement in the audit process, including attendance at mortality meetings.

B. Continued personal development:

i. Computer literacy and familiarity with commonly used systems.
ii. Critical approach to information gained from literature review and audit.

iii. Preparation of manuscripts and teaching materials.

iv. Oral presentation skills.

v. Time management skills.

vi. “Reflective practice” skills – learning and creating knowledge by personal reflection.

C. Research

i. Innovative approach to clinical problems.

ii. Willingness to assess evidence of which to base practice.

iii. Understanding of research methodology, including the randomized controlled trial.

iv. Attendance at research orientated national meetings.

v. To have undertaken a defined piece of academic research, which has led to publication in a peer, reviewed journal.

FACULTY

In addition to the faculty in Department of ENT, Head and Neck Surgery, senior faculty from

a) Department of Anaesthesiology

b) Department of Plastic surgery

c) Department of Imaging Sciences

d) Department of Maxillofacial Surgery

e) Department of Genetics

f) Department of Pathology

g) Department of Microbiology
h) Department of Surgical Oncology
i) Department of Medical Oncology
j) Department of Ophthalmology

TEXTBOOKS
2. Stammberger’s Functional Endoscopic sinus surgery
3. Anatomic principles of endoscopic sinus surgery Renuka Bradoo
4. Endoscopic sinus surgery – a comprehensive atlas by Carlos Yanez
5. Micro endoscopic surgery of he paranasal sinuses and the skull base By AC Stamm, W Draf
6. Micro endoscopic surgery of he paranasal sinuses and the skull base by P H Hwang and D W Kennedy, S Ac DW
7. Functional endoscopic sinus surgery - the Messerklinger Technique by Heinz Stammberger and Gino Hasler

JOURNALS
1. Indian Journal of Otolaryngology and Head neck Surgery.
2. Journal of Laryngology & Otology
3. Laryngoscope.
5. Archives of Otorhinolaryngology.
6. Otolaryngology Clinics of North America

DATABASES AND SEARCH ENGINES
PubMed
ISI Citation Database
Medical Photographic Library
Schedule of training programme

The fellow will primarily work in the Outpatient department and will function along with the consultant thereby assisting in day to day ward work and in surgical preparation / care.

EVALUATION

Evaluation will be by a combination of formative and summative assessments.

Formative assessments

Supervised acquisition of skills in carrying out procedures both in cadaveric dissection and in clinical situations will be assessed on a continuous basis

Periodic assessments during participation in discussions regarding approach to patient with sinonasal disease, interpretation of investigations, and planning of treatment

Regular assessments during interaction in clinical presentations by the fellow and others faculty members of the department.

Participation in seminars, journal clubs and panel discussions

Presentations in conferences - in state, national and international fora

Assistance in organising CME, Surgical and Cadaveric workshops
Avidity to pursue research and publish articles in peer reviewed journals

Maintainance of log book and record of interesting cases.

Assessment while handling emergency and decision making in these situations.

Summative assessment

At the end of the six months period a onetime assessment will be carried out. It will be in the form of the clinical theory exam, practicals and viva voce with case presentation for a total of 200 marks.

Attendance : Attendance is a must with 100%.

Casual leave : Seven days in six months.

Conference leave : Five days per session (provided the paper is accepted)

Absence of leave taken other than this will result in extension of the course.

POST DOCTORAL CERTIFICATE COURSE IN ENDOSCOPIC RHINOLOGY

Applications are invited for Post Doctoral Certificate Course in Endoscopic Rhinology in Department of ENT Head and Neck Surgery, Sri Ramachandra Medical Centre.

Eligibility: Candidates possessing MS.or DNB in (ENT) from any recognized institution are eligible to apply. Duration of the course is six months starting July 2015.

One candidate will be selected.

Fees : Rs 2,50,000/- payable at time of admission.

Stipend of Rs.25,000 per month

Last date for applying : 31st May.

Apply with your Resume to Prof Lt Col A. Ravikumar, Director & Head of Clinical Services, Department of ENT Head and Neck Surgery, Sri Ramachandra Medical College and Research Institute, Porur, Chennai – 600 116.

Contact No: 044 24765516 extensions 312 / 490.