curriculum

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YENEPOYA (Deemed to be University)

Deralakatte, Mangaluru -575018

POST DOCTORAL FELLOWSHIP CLEFT & CRANIOFACIAL SURGERY

CENTRE FOR CRANIOFACIAL ANOMALIES

2012

POST DOCTORAL FELLOWSHIP CLEFT & CRANIOFACIAL SURGERY

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POST DOCTORAL FELLOWSHIP CLEFT & CRANIOFACIAL SURGERY

INTRODUCTION :

Clefts and Craniofacial Anomalies are some of the most commonly encountered congenital anomalies. With valuable support from various non-profit organizations, centres of excellence in the management of Cleft and Craniofacial Anomalies are developing at rapid pace all over the world. Multidisciplinary approach in the management of Cleft and Craniofacial Anomalies is vital. Various surgical, medical, dental and speech and language specialties are involved in this holistic management. The complete rehabilitation of an individual with these deformities begins from the time of its detection, which could be in its intra uterine life, to the time well into his adulthood. Rapid advances, innovations and changes in ideas have to be disseminated and surgical skills need to be taught to surgeons interested in specializing in this branch. This fellowship program aims at empowering surgeons with this essential armamentarium towards providing a complete and scientific surgical treatment to individuals suffering from these anomalies. The fellowship program is conducted by the Centre For Craniofacial Anomalies under the auspices of YENEPOYA UNIVERSITY, supported by the Yenepoya Medical And Dental College.

Goals:

To establish a comprehensive training program for maxillofacial surgeons in the management of Cleft Lip & Palate care.

Objectives:

Knowledge: The trainee should acquire detailed knowledge pertaining to the cases of Cleft Lip & Palate, privative measure if any, diagnoses and appropriate investigation to support the diagnoses at different stages in the development and growth of the diagnoses at different stages in the development and growth of the child with cleft lip & palate anomaly or other developmental craniofacial deformity. Complete knowledge of all aspects of the management of this complex deformity including the concept of team management with interaction between other associated specialties like orthodontics, pediatric dentistry, speech therapy, ENT, etc.

Skills & Attitudes: The trainee should, at the end of one year, be able to provide seamless care in all aspects of cleft lip & palate surgery from birth till adulthood. The specific surgical skills required are

1. Primary cleft lip repair.
2. Primary cleft palate repair.
3. Secondary alveolar bone grafting.
4. Pharyngoplasty.

5. Secondary lip repair.
6. Secondary palate repair.
7. Orthognatic surgery including Le Fort I osteotomy, mandibular osteotomy and any other skeletal surgery as may be required.
8. Distraction osteognesis.
9. Rhinoplasty.
10. Flexible fiberoptic nasobroncoscopy to evalua velopharyngeal function
11. Other surgical skills required in the management of more extensive facial deformities.

The trainee should develop a compassionate attitude towards dealing with both the cleft children and the parents and relatives.

Communication abilities:

It is essential to develop skills required to maintain a harmonious working relationship with all the specialists involved such that the principles of good team management can be established.

Course contents (syllabus):

Essential Knowledge: The trainee should acquire detailed knowledge pertaining to the cases of cleft lip & palate anomaly or other developmental craniofacial deformity. Complete knowledge of all aspects of the management of this complex deformity including the concept of team management with interaction between associate specialties like orthodontics pediatric dentistry, speech therapy, ENT, etc.

Essential investigation and diagnostic procedures:

1. Flexible fiberoptic nesenboscopy to evalua velo- pharyngeal function.
2. Evaluation of CT scan angiogram, MRI etc, as required.

Procedural and operative skills

Graded responsibility in care of patients and operative work (Structured training schedule): a structured programme will be enforced to introduce the trainee to the evaluation and management of cleft lip & palate deformities.

The recognized cleft center must be performing not less than 200 surgical procedures in the area of cleft lip & palate surgeries per annum in order to be able to provide sufficient training material for the fellowship candidate.

Each fellow at the end of 1 year should have carried out at least 50 cases under the supervision of a senior specialist on all aspects of cleft surgery.

+Key: O – Washed up & observed

A – Assisted a more senior surgeon

PA – Performed procedure under the direct Supervision of a senior specialist.

PI – Performed independently.

Surgical procedures:

Procedures	Category	Number
Unilateral cleft lip	PA	15
Bilateral cleft lip	PA	5
Cleft Palate	PA	15
Secondary Alveolar Bone grafting	PA	10
Cleft osteotomies	PA	5
Pharynoplasties	A	5
Secondary lip repair	A	5
Secondary palate repair	A	5
Distraction osteogneses	A	3
Cleft rhinoplasty	A	5
Fibreoptic nasendoscopy	PA	5

The above suggested categories level of training and number are minimal requirements. The students / teachers are encouraged to advance these further to the best of their abilities and also strive to gain experience in many procedures that are not listed.

Eligibility criteria for candidates:

The candidates applying for fellowship should have successfully completed either of the following:

1. MDS in Oral Maxillofacial Surgery in DCI approved program.
2. DNB in Maxillofacial Surgery recognized by the DCI
3. Passed FDSRCS from the Royal College OF Surgeons of England, Glasgow or Edinburgh.
4. Passed FFDRCSI from the Royal College of Surgeons of Ireland.

Requirements For accreditation of an institution:

The department of Maxillofacial Surgery should have been in existence in the institution as an independent unit or as a part of the dental college. Should have performed at least 200 major maxillofacial surgical procedures related to cleft lip & plate surgeries in the previous year.

The Staff:

The director of the program should be an actively practicing and dedicated maxillofacial surgeon

- should have done at least 500 major surgical procedures related to cleft lip & palate surgery
- should have post – graduate degree in maxillofacial surgeon with at least 8 years of continuous exclusive experience in the art of cleft lip & palate surgery after post graduation
- Should be a post graduate teacher for an MDS program in Oral & Maxillofacial Surgery.
- Should have taken part and presented papers in National and International Maxillofacial & Cleft surgery conferences

Teaching / Learning activities: The training program must include the following didactic activities:

1. Lectures by faculty not only in maxillofacial surgery but also in related specialties like orthodontics, speech therapy, ENT etc.
2. Every fellow would have to develop and complete at least one research project which could be either clinical or lab based, preferably leading to either a presentation or publication in a peer reviewed journal.

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Participation in departmental activities:

a) Journal reviewed meetings: One session every two weeks.

b) Seminars : One session every two weeks

c) Clinico pathological conferences : Not essential

d) Inter departmental meetings: One multi- disciplinary cleft team meeting a week to discuss management protocols for specific cases (co re specialist required are maxillofacial surgeon, orthodontist, plastic surgeons and speech therapists. Other specialist who form second tier are pedodontis, ENT, dentist, social worker, psychologist, pediatrician,etc.

e) Community work – camos/ field visits: It is important to improve awareness amongst the local population about the etiology, prevention and management of cleft deformities. The trainee shall learn to organize camps in various districts surrounding the cleft center. Follow up field visits are also essential.

f) Clinical rounds: Daily two rounds shall be held, at least one of which will be led by the consultant.

g) Any other: Trainees will be encouraged to publish papers in peer reviewed journals.

Orientation program: Ex: a) Use of library, b) Laboratory procedures, c) National programs, d) Any other: Not essential.

Training and teaching skills and research methodology:

Trainees will be encouraged to participated in teaching activities related to MDS (Oral Maxillofacial Surgery). Fellowship trainees will have to initiate and complete an independent research project under supervision.

Monitoring of teaching / learning activities

a) Methods:
1. Direct consultant to trainee interaction.
2. Maintenance of log book.
3. Formal quarterly review of performance.

b) Frequency c) Schedules or checklists, log books diary.

University Examination

There shall be one theory paper of three hours duration carrying 100 marks. Clinical examination would also be for 100 marks and viva voce would be for 50 marks/. A candidate has to score a minimum of 50% for passing the examination.

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Scheme of examination:

a) Written: One clinical paper covering cleft lip & palate management.
b) Clinical examination: 2 case presentations with discussion on diagnoses, treatment plan and management.
c) Viva-voce-1 viva of 1 hour duration can be held to complement the written and clinical examination.

Examiners: 3–One internal

Two externals

Appointed by the university.

Recommended books and journals:

1. Multidisciplinary management of cleft lip and plate by bardach and Morris.
2. Atlas of cleft and craniofacial surgery by salyer and bradach.
3. Plastic surgery by McCarthy.
4. Cleft lip & palate by Berkowitz.
5. Cleft Palate & Craniofacial Journal.
6. Plastic reconstructive surgery Journal.
7. Journal of Craniomaxillofacial Surgery.

Fellowship Programme in Cleft & Craniofacial Anomalies Syllabus

		List of Activities	Sub posting	Number of Hours
A.	First Five months-	- Assisting Cases, - Case Discussion - Journal Club- One/ week - Seminars- Two/ week - Research methodology - Selection of topic for Short Study - Case Documentation, - OPDs and - Patient Care - Daily Log book maintain	**A. 20 Working Days** General Medicine (Checking Vitals, Chest Radiograph reading, General medical examination etc)- On non-operating days **B. 20 working Days** Pediatrics posting (Checking Vitals, Chest Radiograph reading, General medical examination ICU postings etc) On non-operating days ***C.*** **20 Working Days** Neurosurgery **D.10 Working Days** General Anaesthesia ***E.*** **5 Working Days** BLS. Anatomy – 10 days with dissection and using Anatomage table in simulation. Other Simulationbased training **F.10 Working days** Orthodontics-(NAM, Cephalometrics, Use of Dolphin, Surgical case	80 hours 80 hours 160 hours 80 Hours 40 hours 80 hours

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			planning) On non-operating days **G. 5 working days** Pediatric Dentistry(Child Behaviour and Dental Treatment options for Cleft Children) ------ Along with full time postings in Center for Craniofacial Surgery Seminars-	40 hours 640 hours
B	Next Three months	Externship in GSR Institute of Craniomaxillofacial Surgery, Hyderabad, Telengana	- Assisting Cases, - Case Discussion - Journal Club - Seminars - Case Documentation, - OPDs and - Patient Care - Daily Log book maintain	720 hours
C	Next Four months	Assisting Cases Performing few Cases independently, submission of short Study, Examination,	**A. 15 Working Days** ENT Posting- On non-operating days **B. 10 Working Days** Speech Therapy posting On non-operating days Along with full time postings in Center for Craniofacial Surgery	980 hours

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Introduction	History, Epidemiology
Anatomy, Patho-Embryology & Growth and Development	Normal Anatomy and Embryology of Craniofacial Complex Embryogenesis Cleft Lip and Palate and Craniofacial Anomalies , Genetics: Syndromic and Non-syndromic Clefts, Postnatal Craniofacial Growth and Development, Anatomy in Cleft Lip and Palate and Craniofacial Anomalies, Facial Growth in Cleft Lip and Palate
Clinical Features and Classification	Cleft Lip and Palate, Rare Clefts, Other Craniofacial Anomalies
Unilateral Cleft Lip Deformity	Anatomy, History and Surgical goal, Management, Presurgical Orthopaedics, Evolution of Surgery, Lip Adhesion, Techniques of Lip Repair, Primary Nasal Correction, Secondary Lip Deformities, Secondary Surgeries
Bilateral Cleft Lip Deformity	Anatomy, History and Surgical goal, Management, Presurgical Orthopaedics, Evolution of Surgery, Lip Adhesion, Techniques of Lip Repair, Management of Premaxilla, Primary Nasal Correction, Secondary Lip Deformities, Secondary Surgeries
Cleft Palate Deformity	Anatomy, History and Surgical goal ,Feeding, Speech, Management, Timing of Surgery, Techniques of Repair, Prosthodontics Obturation, Velopharyngeal Incompetence(Assessment, Management, Pharyngeal Flaps, Pharyngoplasties)
Alveolar Bone Grafting	Anatomy and Management
Cleft Rhinoplasty	Anatomy and Management
Orthodontics in Cleft Lip and Palate:	Maxilla, Mandible, Dentition, Cephalometry

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Rare Cranio-oro facial Clefts:	Incidence, Embryogenesis, Classification, Management
Principles of Craniofacial Surgery:	Orbital Hyperteleorism(Assessment and Planning, Surgical Correction)Craniosynostosis (Etiopathogenesis, Evaluation, Management: Early Surgery Late Surgery) Craniofacial Microsomia (Embryology, Etiopathogenesis, Clinical Spectrum, Evaluation, Management)
Craniofacial Syndromes	Treacher Collins Syndrome (Mandibulofacial Dysostosis),Romberg's Disease (Hemifacial Atrophy),Pierre Robin Sequence ,Klippel Fiel Syndrome(Dysmorphology, Evaluation, Management),
Orthognathic Surgery and Principles of Distraction	Historical Perspectives, Dental Occlusion, Treatment planning, Osteotomies: Maxillary/Mandibular, Distraction Osteogenesis, Cephalometry, Model Surgery (Orthodontic Consideration, Surgical Correction)
Cleft Center	

Log Book:

Log Book to be maintained for evaluation of the following:

- Interpersonal and communication skills
- Medical Knowledge
- Patient Care
- Clinical Acumen
- Surgical Skills
- Practice based learning and improvement
- Professionalism
- Attendance and availability
- Enthusiasm and responsiveness

Attendance: as per University Regulations.

Scheme of Examination:

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Theory Examination (200 marks)- Conducted in two days

Will comprise of two papers of 100 marks each.

Paper I	Cleft Lip and Palate
Paper II	Craniofacial Surgery and allied subjects like Orthodontics, Otolaryngology, Speech and Language Pathology, Paediatrics, Genetics, General and Paediatric Dentistry.

Type of Questions	**Number of Question**	**Marks for each question**	**Total marks**
Long Questions	2	20	40 (20 x 2)
Short Questions	6	10	60 (10 x 6)

Pattern of Questions

Assessment	Number	Marks	Hours
Long Case	1	70	45 minutes
Short Cases	1	40	30 minutes
Viva Voce	-	50	45 minutes
Short Study presentation	1	10	20 minutes
Log book Assessment	1	30	10 minutes

Practical Examination (200 marks)- Conducted in one day

Examiners:

Three Examiners: One Internal and Two External.

Examination results:

- The fellow has to score at least fifty percent of the marks in the theory and practical individually to be declared successful and for the award of the fellowship.