Proposal for AOMSI fellowship program in Maxillo-facial Implantology

- Introduction
- Scope And Need For Maxillofacial Implant Dentistry
- Course Details
 - o Basic Implantology
 - o Advance Implantology
 - o Digital Implantology
- Structure Of The Program
 - o Technical Training
 - Clinical Training
- Program Objectives
- Participation In Departmental Activities
- Evaluation At The End Of The Training
- Faculty
- Centre Requirements
- Eligibility Criteria
- Log Book Submission
- Exit Examination

INTRODUCTION

This proposal for a new Fellowship program in Oral & Maxillofacial Implantology outlines the need, candidacy, institutional requirement, selection process and structure of the training program. The overall goal of the training program is to provide well rounded extensive training and a broad exposure to all aspects of Contemporary Implant Dentistry.

SCOPE AND NEED FOR MAXILLO-FACIAL IMPLANT DENTISTRY

Over the past decades, implant dentistry has evolved to be a very predictable treatment modality for treatment of lost teeth and has now become one of the most common surgical procedure carried out worldwide. Yet maxillary atrophy, maxillary resection, complication after grafting procedure, congenital or maxillary defect are a challenging part. This is where the advanced Maxillo-facial implants give exceptional result.

One must require extensive training to perform the procedure

COURSE DETAILS

The Program includes curated didactic sessions and research conducted by senior specialists and internationally acclaimed Implantologists from fraternity.

BASIC IMPLANTOLOGY

- Principles Of Basic Implantology
- ➤ Anatomy And Biology Of Bone
- Case Selection
- Diagnosis And Treatment Planning Radiological Evaluation
- ➤ Implant Biomaterials, Biomechanics, Types & Classification
- Surgical principles of implant
- Prosthetic principle of implant
- ➤ Virtual planning
- ➤ Use of Planning software
- > Evaluation & Use of CBCT
- ➤ Implant Placement On Models
- Live Surgical Demonstration Of Implant Placement
- > Implant placement in patient
- ➤ Maintenance Of Implants
- ➤ Practice Management And Profitability Ethical Branding And Consumer Awareness Of An Implant Practice

ADVANCE IMPLANTOLOGY

- > Full mouth treatment planning
- ➤ Atrophic jaw management
- Selection and use of Bone Grafts And Materials
- ➤ Immediate Implant Loading
- Management of Post-Ablative cases- maxillectomy, fibula graft
- > Zygomatic implants-Principle, Technique
- > Pterygoid implants- Principle, Technique
- > Tilted implant
- ➤ All- on-four /all-on six
- ➤ Nerve lateralization
- ➤ Advanced Prosthetic Rehabilitation
- ➤ Management Of Complications

- DIGITAL IMPLANTOLOGY
- Principle of digital case planning
- ➤ Intraoral scanning
- > Principle of digital prosthetic workflow

STRUCTURE OF THE PROGRAM

TECHNICAL TRAINING -

Sessions will be complemented by intensive surgical demonstrations and pre-clinical trainings on models. It will offer integration of Digital Dentistry with simple cases and complex cases with comprehensive hands-on experience

- Second Stage Treatment
- Prosthetic Rehabilitation

CLINICAL TRAINING -

Implantology is a dynamic and rapidly changing specialty and each day will bring new experiences to the participants. The program offers a patient-based treatment experience with the Implant and prosthodontic surgical treatments being undertaken by them under close mentoring of the faculty.

- Live Surgery On Patients By Participants
- Second Stage Surgery On Patients By Participants
- Prosthetic Loading Of Implants By Participants

CASE RECORD – Participants have to plan the case virtually prior and get it approved by the mentor. Participants will have to photograph selected cases in progress to provide a case record file of the current treatment techniques utilized.

The clinical work of each participant will be audited by the faculty to enhance their experience.

PROGRAM OBJECTIVES

Goal 1: To train the participants to achieve proficiency and capability to confidently and successfully integrate and deliver implant treatment in their practice.

Goal 2: To provide in-depth didactic and clinical instruction in problem based patient situations that requires implant prosthodontic and surgical solutions

Goal 3: To train the Dental Surgeons in the program about practice management, profitability and ethical branding and consumer awareness and development in Implant Dentistry

Goal 4: To accomplish management of patient's implant and rehabilitation needs successfully so that the patients are satisfied, comfortable and acceptably treated in a timely, efficient manner. Also, to achieve the highest levels of patient treatment compliance.

PARTICIPATION IN DEPARTMENTAL ACTIVITIES:

- a. Journal reviewed meetings: One session every two weeks
- b. Seminars
- c. Case discussion
- d. Case planning
- e. Post operative discussion
- f. 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.
- g. Any other: Trainees will be encouraged to publish papers in peer reviewed journals.

EVALUATION AT THE END OF THE TRAINING

The trainee should, at the end of one year, be able to diagnose, plan and manage cases requiring dental implants.

FACULTY

The director of the program should be an actively practicing and dedicated maxillofacial surgeon. The unit should be headed by a person with a minimum of 10 years of post MDS experience. Should have done at least 1000 major maxilla-facial implant cases.

REQUIREMENTS FOR CENTRE

The centre should be equipped to have performed at least 1000 major maxillofacial surgical procedures related to maxillofacial implant surgeries in the previous year. Should have faculties trained for same.

1. Faculty Requirements

Name	Years after MDS	No. of cases done/year
1.		
2.		
3.		

• Please attach detailed CV of all members of faculty

2. Details of Cases done in past year

Implant Placement Surgery	Performed by:	No. of cases done/year
in partially edentulous	ľ	·
patients		
Full mouth Implant surgery		
Atrophic jaw management		
Management of Post-		
Ablative cases-		
maxillectomy, fibula graft		
Zygomatic implant surgery		
Pterygoid Implant surgery		
All- on-four /all-on six		
Nerve lateralization		

3. Facilities present

Minor OT with Dental Chair	Yes/No	Comment
Radiovisuography	Yes/No	
Major OT	Yes/No	
Seminar Room	Yes/No	
A/V equipment	Yes/No	
Sedation & General	Yes/No	
Anesthesia equipment		
Recovery Room	Yes/No	
CBCT Scanner	Yes/No	
Intra-oral Scanner	Yes/No	

Dental Implant Planning	Yes/No	
Software		
Surgical Loupes and	Yes/No	
Microscopes		
CAD/CAM	Yes/No	
3-D printer	Yes/No	
Dental Laser	Yes/No	
Piezo-surgery Unit	Yes/No	
Ridge-split kit	Yes/No	
Ridge expansion kit	Yes/No	
Direct Sinus lift instruments	Yes/No	
Indirect sinus lift equipment	Yes/No	·

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. Knowledge of Basic Implant candidate must have at least placed 10 conventional dental implants till date, one full mouth case assisted or performed, 1 direct / indirect sinus lift case performed

Duration: I year

Number of Candidates per course: 1 or 2

LOG-BOOK SUBMISSION

To analyze the proficiency of the candidate and to design a custom made program for them The candidate are required to submit his/her implant cases log book in the following format. KEY-

A – Assisted a more senior surgeon

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

PI – Performed independently.

PROCEDURE	CATEGORY	NUMBER
Single conventional Implant		
Multiple conventional implant		
Direct Sinus lift		
Indirect sinus lift		

Bone grafting	
Full mouth implant case	
Zygomatic implant case	
Pterygoid implant case	

EXIT EXAMINATION

Theory paper: (3 hours). There would be 20 MCQs of 20 marks and 8 subjective questions of 10 marks each. There is no negative marking. **Total:** 100 marks **Practical exam** would have one long case and 2 short cases followed by a theory viva.

- 1. Long case would be of 60 marks (30 Minutes)
- 2. Short cases of 40 marks each (15 minutes for each short case) Total: 140 marks
- 3. Theory Viva: 60 marks

Total: 300 marks

Candidates need to secure 50 % marks in theory and practicals separately to have passed the examination.