



MGM INSTITUTE OF HEALTH SCIENCES

Accredited by NAAC with 'A' Grade

(Deemed University u/s 3 of UGC Act, 1956)

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Curriculum for Fellowship in Minimal Access Surgery (w.e.f. Academic Year 2018-19)

Approved as per BOM -53/2018, [Resolution No. 4.8], Dated 19/05/2018



MGM University of Health Sciences,
Navi Mumbai

SYLLABUS

**“Fellowship Course in Minimal
Access Surgery”**

Objective:

This is a one year fellowship program that is available for candidates desiring additional training in Minimal Access Surgery (Laparoscopic surgery)

The goal of this Fellowship Programme is to provide Surgeons with comprehensive academic, research and clinical training in Minimal Access Surgery (Laparoscopic surgery). This will include learning on the pathophysiology, evaluation, diagnosis and current Standard Management in all pathologies that lead them to Fellowship in Minimal Access Surgery (Laparoscopic surgery). There will be a very strong emphasis on research, scholarly activity and teaching experience. This Fellowship will enable candidates to have a strong foundation to receive the Post-Doctoral Fellowship Award from the MGM UHS and consequently have a successful career in clinical practice

Programme:

The Fellowship seeks MS/ DNB (Republic of India and MCI accredited) qualified General Surgeons with a very strong commitment to academic evidence based medicine and research. It provides both didactic and self directed teaching at both clinical and research skills.

Name of the Course

Minimal Access Surgery (Laparoscopic surgery)

Course Duration.

1 year.

Course fee.

As per University rules

Eligibility for Candidate for the Award of Fellowship

M.S. /D.N.B. (Republic of India and MCI accredited) in Surgery. For Foreigners, Post graduate degrees equivalent to and recognized by Medical Council of India.

Selection process:

A total of 2 candidates per will be selected for course.

- MCQ'S - 50%
- Publication - 10%
- Interview - 40%

Selection Criteria for candidates:

Fellows should be selected in a fair and non-discriminatory manner in accordance with the Equal Opportunities.

The candidate is **expected to appear for the multi-choice (MCQ) written examination of 100 marks.** Selected candidates will be called for the interview. Ultimately, selection of a candidate for a fellowship will be done by an interview with panel of faculties constituted by the MGM UHS.

Examination paper for selection of candidates for Fellowship:

Three sets of MCQ paper will be set by the committee of the faculties approved by MGM UHS & only one paper will be selected by random process on the day of examination.

Evaluation of the examination conducted will be done by a committee of faculties

Merit list & Successful candidates name will appear on the WEB site of MGM UHS

CRITERIA FOR INSTITUTIONAL RECOGNISATION BY MGM UHS

Institutional requirement : Institute should have all minimum facilities for advanced training and demonstration of surgical skill.

A) Fellowship courses in minimal access surgery :

1. Faculties doing Advanced Laparoscopy for more than 10 years.
2. Dedicated Operating room for dry labs which is well equipped with Simulators for individual participants for developing hands eye coordination or any additional required practice.
3. Various simulators for Hands eye coordination skill development, any other skill development for respective courses
e. g. Virtual Simulator (LAP MENTOR)
4. Conference room facility, Polycom facility for Audio visual
5. Library (BOOKS, JOURNALS & VIDEO)
6. Live relay OT facility

Criteria for the faculty with MGM UHS for Fellowship of Minimal Access Surgery (Laparoscopic surgery) :

- 1) Minimum 10 years' experience of Surgery in the specified course/module.
- 2) Minimum 5 years' experience of Teacher in a teaching institute
- 3) A University Diploma/Fellowship/Doctorate in specific surgery is preferred

1. Program Director

A single program director must be responsible for the fellowship program.

a. Qualifications of the program director

The program director must be a surgeon who is qualified to supervise and to educate fellows and must meet requirements stipulated by MGM UHS. The director must be recognized nationally or regionally by his or her peers as a leader in the area of the program's focus.

Program director must:

1. Be certified by the Medical Council of India.
2. Be licensed to practice medicine in the state in which the sponsoring institution is located.
3. Maintain a cooperative working relationship with all other recognized surgical training programs
4. Be a member in good standing of at least one of the constituent societies
5. Minimum 10 years' experience of Specific/specialized Surgery
6. A University Diploma/Fellowship/Doctorate in Specific/specialized surgery.
7. Demonstrated experience and/or expertise in teaching residents, fellows, or post graduate surgeons on a regional, national or international level.

A. Responsibilities of the program director

It is the responsibility of the program director to support the fellowship program by devoting his or her efforts to its management and administration. The director is also expected to be an active and recognized participant in the institution's clinical and educational programs.

Preparation of a written statement: to include an outline of the goals of the fellowship program with respect to knowledge, skills, and other attributes, a narrative description of the fellowship, including details of fellows' involvement in clinical, research, teaching, and administrative activities, and a description of the relationship between the fellowship and the general surgery residency program. This statement must be made available to fellows, general surgery residents, the director of the general surgery residency program, and members of the teaching staff.

1. Selection of fellows for the program in accordance with university norms and procedures.
2. Selection and supervision of the teaching staff and other program personnel at each institution participating in the program.
3. Supervision of fellows through explicit written descriptions of supervisory lines of responsibility for the care of patients. Such guidelines must be communicated to all members of the fellowship program staff.
4. Organization and supervision of the research activities of fellows.
5. Organization and supervision of fellows' participation in conferences and other educational activities, and oversight of implementation of the fellowship curriculum.

6. Implementation of fair procedures, as established by the sponsoring institution, regarding academic discipline complaints and grievances.
7. Oversight of accurate tabulation and recording of operative logs by surgical fellows in the Fellowship case log system.
8. Notification in writing to Accreditation Committees of MGM UHS if there is change in the faculty complement for the fellowship.

B. Clinical Responsibilities

The fellow will attend and work under the faculty in the recognised institutes on the assigned modules. He/ She will participate in the preoperative assessment and planning as well as the post-operative follow-up of their assigned patients under the faculty guidance.

C. Research Training:

All Fellows are expected to be intimately involved with the program's research activities, to publish at least one paper in a year and present their work at local, regional and National meetings and conferences. Most of the research will focus on the current techniques and outcomes evaluations of Procedures. These will involve both clinical and laboratory based work.

The Programme recognizes the necessity that its Fellows have a basic knowledge in specified Surgery. Didactics, round table meets and seminars will routinely update the academic content of the programme. This will be supplemented with Clinical Learning, through outpatient clinics, ward rounds and presentations and operative experience in the form of assisting and being proctored over surgical procedures

D. Expectations include: All Fellows

- Demonstrate manual dexterity appropriate for their training level.
- Critically evaluate and demonstrate knowledge of pertinent scientific information. Practice-based learning and improvement that involve investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care
- All Fellows will present and review current literature at Journal Clubs.
- All Fellows will be expected to actively participate at local, regional and National seminars and conferences.
- Maintain high standards of ethical behavior.
- Demonstrate sensitivity to age, race, gender, and culture of patients and other health care professionals
- Practice high quality, cost effective patient care. Demonstrate knowledge of risk benefit analysis.

E. Portfolio Management :

All Fellows will maintain a Fellowship PORTFOLIO.

Two monthly review of following topics by faculty via internet /in person this will include:

- Research/Project
- Log Book
- Presentations
- On-going Publications
- Number of hours spent on hands on practice
- Summaries of case discussions and presentations.
- Synopsis of publications.

Maintaining accurate case logs is critical to each fellow. These numbers are vital for hospital privileging. It is mandatory that case logs are entered by each fellow into the Specified Surgery/Course Fellowship Case Log. Case logs need to be printed and brought to the monthly didactic meetings for review. Failure to do so results in the curtailing of operative privileges. Log book, presentation & Dissertation will be signed & evaluated on a time to time basis by respective faculties.

F. CURRICULUM:

1. General Topics :

- Basic Principles & Optics used in Lap. Surgery
- Basic Introduction of the Instrumentation and the Ergonomic their uses in the Laparoscopic
- Operations Comparison with the open instruments Advantages & disadvantages of the open surgery vs MAS
- Selection criteria of the Patient for open or Laparoscopy surgery
- Caring, Cleaning, disinfecting & Sterilization of the Laparoscopic Instruments &optics
- Role of the Hands eye coordination in the Laparoscopic operation
- Anesthesia complications due to laparoscopic operations.
- Laparoscopic complications, avoidances & troubleshooting
- Surgical site Infection in Laparoscopic Surgery

2. Tissue Approximation Techniques in M.A.S.

a) Laproscopic Knotting & Suturing. Laparoscopically place a suture into foam with marked points 2 cm apart and tie down 3 consecutive knots in less than 1 minute with the camera in a standard position.

b) 2 Layer anastomosis—Laparoscopically perform an intact and patent handsewn 2 layer anastomosis

3. Laparoscopy

- a. Laparoscopic Cholecystectomy
- b. Laparoscopic CBD Exploration
- c. Laparoscopic Cystogastrostomy
- d. Laparoscopic Appendectomy
- e. Laparoscopic Adhesiolysis
- f. Diagnostic Laparoscopy

4. Laparoscopic Hernia Repair M.A.S.

- a) Ventral Hernia IPOM b) Groin Hernia TAPP /TEP c) Lap. Fundoplication

5. MAS Solid Organ Surgery

- a) Liver Biopsy b) Splenectomy c) Excision of Hydatid Cyst

6. MAS Urological Surgery

- a) Lap Nephrectomy b) Lap Adrenalectomy c) Lap Pyloplasty

7. VATS

- a) VATS Oesophageal Dissection b) VATS Wedge Pulmonary Resection & Lobectomy

8. MAS Colorectal Surgery

- a) Low Anterior Resection b) Hemicolectomy

9. Pancreas

- a) Lap. Cystogastrostomy b) Lap. Necrosectomy c) Lap. Distal Pancreatectomy

G. Suggested reading :

Books :

- 1) Practical gastrointestinal endoscopy :The Fundamentals -6th edition , P .B. Cotton, C. Williams
- 2) Endoscopy related topics from Sleisenger and Fordtran' s Gastrointestinal and liver disease. 7th edition,
- 3) Robert H, Hawes : Endosonography (Elsevier , Saunder)
- 4) Sugano K Double balloon endoscopy – Therapy and practice (Springer)
- 5) M . Classon. Gastroenterological endoscopy (Thieme)
- 6) Tytgat GWK. Practice of therapeutic endoscopy W.W.Saunders)
- 7) Sivak Gastroenterologic endoscopy (W.B. Saunders)
- 8) J. H. Siegal . Endoscopic Retrograde Cholangio pancreatography
- 9) Barkin . Advanced therapeutic endoscopy (Raven press)
- 10)Van Dam , Sivak . GI Endosonography (w. B. Saunders)

- 11) Wilcox . Atlas Of Clinical G.I. Endoscopy (Saunders)
- 12) Keeffe E.B. Atlas of G.I. Endoscopy (Current Med. Ins)
- 13) Klaus . Atlas of G.I. Endoscopy and pathology (Blackwell)
- 14) Kenchel .Atlas of video capsule endoscopy (Springer)
- 15) Messmann H. Atlas of colonoscopy (Thieme)
- 16)Advanced therapy in gastrointestinal and liver disease .
- 17)Sohendre . Colour atlas of prerative techniques – Therapeutic endoscopy (Thieme)

Journals :

1. Endoscopy
2. G. I Endoscopy

I) Evaluation process:

- i. The performance of the fellow will be monitored carefully during the course of training

- ii. Formal evaluation by the faculty members on a regular basis. This includes the performance of procedure. of findings and planning/ performance of appropriate therapy. These will be recorded in the log book maintained by the candidate.

Procedure	Number done	Documentation of competence by the faculty member

iii) At the end of the course there will be :

- a) Written exam
- b) Practical test: Skill assessment in performing laparoscopies,
- c) Orals : Radiology/ instruments, clinical reasoning and selection of endoscopic procedures in different case scenarios.
- d) Evaluation of research project

J) To successfully complete the fellowship

- a. The candidate should pass the exit exam with at least 50% marks in each oral and practical exam.
- b. The research project should be complete and approved by external Faculty
- c. The log book containing documented competence in endoscopic procedures should be approved by the external faculty.

K) Faculty :

Professor
Associate Professor
Assistant Professor

L) Selection

Selection will be based on performance at interview.

M) Pattern of Exam

Each year an examination coordination committee (ECC) consisting of three teachers running Fellowship / certificate courses will be nominated by the director of the Institute. Both theory and practical Examinations will be concluded within 15 days of the end of the course. Examination will be conducted in individual colleges. Each examination will have one internal and one external (approved by the ECC.)

Criteria for Appearing for Exam

1. Complete logbook
2. 1 - Publication
3. 2 – Presentation
4. One year completion of residency

On successful completion of all modules of the Programme the Fellow will be awarded a Certificate of the Fellow in Minimal Access Surgery (Laparoscopic Surgery)

