SAUDI BOARD OF INTERNAL MEDICINE

GASTROENTEROLOGY FELLOWSHIP TRAINING PROGRAM

1420/1999
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td></td>
</tr>
<tr>
<td>II. TRAINING PROGRAM</td>
<td></td>
</tr>
<tr>
<td>III. GENERAL OBJECTIVES</td>
<td></td>
</tr>
<tr>
<td>IV. SPECIFIC OBJECTIVES</td>
<td></td>
</tr>
<tr>
<td>V. ADMISSION REQUIREMENTS</td>
<td></td>
</tr>
<tr>
<td>VI. TRAINING REQUIREMENTS</td>
<td></td>
</tr>
<tr>
<td>VII. STRUCTURE OF TRAINING PROGRAM</td>
<td></td>
</tr>
<tr>
<td>VIII. VACATIONS, HOLIDAYS AND ON-CALL</td>
<td></td>
</tr>
<tr>
<td>IX. EVALUATION CRITERIA</td>
<td></td>
</tr>
<tr>
<td>X. CERTIFICATION</td>
<td></td>
</tr>
<tr>
<td>XI. APPENDIX</td>
<td></td>
</tr>
</tbody>
</table>
I. INTRODUCTION

The kingdom of Saudi Arabia is a rapidly developing country where there has been remarkable progress in the health services. Disorders of the gastrointestinal tract (GIT) and hepatobiliary system constitute one of the major causes of mortality in the country.

Consequently, there is demand for a national training program to equip physicians adequately for their work by giving them the necessary training towards certification by the Saudi Council in Gastroenterology (G.E.). The training will give the trainee a good grasp of clinical as well as social, economic and environmental aspects of health to enable him/her to handle gastrointestinal (GI) and hepatobiliary problems.

II. TRAINING PROGRAM

This is a three-year full-time, structured and supervised training program in Gastroenterology and Hepatology. It will involve admission to an approved Joint Program with rotations in different hospitals.

III. GENERAL OBJECTIVES

1) To produce graduate gastroenterologists with adequate knowledge and skills to cope efficiently with relevant health problems.
2) Train candidates to become disciplined, independent self-learners and provide an educational environment that will promote good standards in health care.
3) Train candidates to perform independent research and to adopt research-oriented approach to new problems.
4) To train graduate candidates to and internationally acceptable standard.
5) To raise candidates awareness of the importance of team approach to medical problem.
6) To produce gastroenterologists with the appropriate attitude to work and medical ethics.
IV. SPECIFIC OBJECTIVES

1) Acquire solid, scientific knowledge in order to make appropriate clinical decisions in the management of patients in the field of Gastroenterology and Hepatobiliary practice, medical problems which are becoming increasingly complex.

2) Gain skills in Gastroenterology and hepatobiliary diagnostic and therapeutic procedures.

3) Understand the sensitivity and specificity, risk-benefits and cost effectiveness of vast diagnostic techniques and therapeutic options.

4) Acquire skills in organizing and conducting research projects.

5) Educate and update themselves and their colleagues in Gastroenterology.

6) Advice colleagues from other subspecialties in G.E. – related problems.

V. ADMISSIN REQUIREMENTS

To be admitted to the Saudi Gastroenterology Subspecialty Program, a candidate must:

1) Possess a Saudi Specialty Certificate in Internal Medicine of its equivalent (which is approved by the Saudi) or have at least successfully completed the written component to the Saudi Specialty Certificate in Internal Medicine.

2) Be licensed to practice medicine in Saudi Arabia.

3) Provide written permission from the sponsoring institution, allowing him/her to participate in full-time training for the entire 3-year program.

4) Sign an undertaking to abide by the rules and regulations of the Training Program and the Saudi Council.

5) Successfully pass the interview for the particular subspecialty.

6) Provide three letters of recommendation from consultants with whom the candidate has recently worked.

7) Register as a trainee at the Saudi Council for Health Specialties.
VI. TRAINING REQUIREMENTS

1) Training shall be full time. Trainee shall be enrolled for the entire three-year period.
2) Training shall be conducted in institutions accredited for training by the Saudi Board of Internal Medicine and the subspecialty of Gastroenterology.
3) Training shall be comprehensive and include inpatient, ambulatory and emergency management.
4) Trainees shall be actively involved in patient care with gradual progression of responsibility.
5) Trainees shall abide by the training regulations and obligations set by the Saudi Board of Internal Medicine.

VII. STRUCTURE OF THE TRAINING PROGRAM

(A) Training Activities:

1) Outpatient:
   In recognition of the importance of outpatient care in the practice of gastroenterology, all trainees must spend at least half a day per week throughout the entire 3-year period in an ambulatory care clinic in which both gastroenterological and hepatic diseases are managed.

2) Inpatient:
   If consultant opinion is sought or GI procedure is required, the patient will be seen by the trainee who will review the history, physical examination and investigations and present the case to the GI consultant (Consultative Gastroenterology).

3) Non-patient care activities:
   In addition to patient care, trainees should have extensive exposure to other academic activities including:
   i) Self-education by reading current textbooks and relevant scientific literature.
   ii) Gastroenterology Journal Club: Once monthly.
   iii) Gastroenterology Meeting:
• Regional Gastroenterology Club.
• One National meeting per year.
• One International Meeting during the training period

iv) Presentation of GI cases of topics:

v) Departmental Educational Activities:
The trainee is expected to attend morning reports, bedside rounds, grand rounds, diagnostic and therapeutic rounds.

vi) Research Activity:
During the training period, trainee should conduct at least one retrospective chart review or submit one case report for publication.

vii) Teaching experiences:
The trainee must participate actively in the teaching of medical students, medical residents, and junior GI trainees whenever possible.

(B) Rotations Are Organized As Follows: First Year:

1) The acquisition of a broad overview of Basic Science of Gastrointestinal tract and Hepatobiliary System (include anatomy, physiology, pharmacology, immunology, etc.) is essential. Each training center should organize a basic science teaching program.

2) The acquisition of knowledge of common gastrointestinal and hepatobiliary diseases is important.

3) The trainee should spend 4 months in a Gastroenterology ward as part of a designated team aiming to increase knowledge, improve skills and clinical judgment.

4) Four months of the year should be spent in learning the principles of endoscopic training which includes: indications, limitations, interpretation of the findings, medications used during endoscopy, potential complications; observation as well as learning to perform endoscopic procedures; how to clean, disinfect and care for endoscopes equipment. By the end of this year, the trainee should be competent in performing upper GIT endoscopy, sigmoidoscopy and esophageal motility studies (Table 1).

5) One-month rotation in Radiology and Pathology:
(a) To observe GI examination with fluoroscopy, Ultrasound, CT, Angiography, related intervention radiology, and utilization of radiologic versus endoscopic GIT examinations.
(b) To observe normal anatomy and functional morphology of GIT and hepato-biliary system.
(c) Identify histological changes of different disease entities and their correlation with clinical, radiologic and endoscopic finding.

**Second Year**

1) During this year, the trainee should be able to demonstrate clear understanding of the basic sciences as applied to Gastroenterology and Hepatology.
2) The trainee should be able to demonstrate knowledge of common Gastrointestinal and Hepatobiliary problems.
3) The trainee should spend 3 months in a Gastroenterology ward to further enhance knowledge, skills and clinical judgment and provide consultations.
4) During this year the trainee should spend 3 months to acquire competency in colonoscopy, polypectomy, esophageal variceal and ulcer bleeding hemostasis and esophageal dilation. By the end of this training period, trainee should have achieved and internationally acceptable level of competence in performing certain procedures (Table II).
5) Have Hepatology training in a liver unit for 3 months.
6) Have a 2-month elective period.
7) At the of this year, a logbook of performed or assisted procedures should be completed and submitted.

**Third Year**

*During this year, the trainee shall have:*

1) advanced training in interventional Endoscopy for 3 months.
2) Enhanced training in Hepatology, including specific experience in Transplant Hepatology for 3 months.
3) Motility Disorders training for 1 month.
4) Biliary tract diseases training including in-depth knowledge of endoscopic techniques and alternative diagnostic therapeutic modalities (medical, surgical and radiological) for 2 months.
5) Training in nutrition, including the acquisition of knowledge for nutrition assessment and adequate nutrition requirements for 1 month.
6) Pediatric Gastroenterology training, including general concepts, age-related and unique aspects of diseases in the pediatric versus the adult patients for 1 month.

VIII. VACATIONS, HOLIDAYS AND ON-CALL

1) Fellows are entitled to four weeks vacation annually and maximum of ten days for both Eid holidays and emergency leave.
2) Sick and maternity leave shall be compensated for during or at the end of training.
3) On-call duty shall be an average of one every three or four nights (minimum of 4 calls per month, 24 hours per call). Fellows are expected to perform regular duties the day after call and ensure continuity of care for their patients.

IX. EVALUATION CRITERIA

A. Performance will be monitored through the year. A written assessment shall be submitted by the Consultant-in-Charge of each rotation.

B. The candidate will be assessed by the regional supervisory committee at the end of each year. This may include a written of clinical examination or both. The candidate will be promoted to the next level if he/she passes the evaluation. Failures will be subject to the rules and regulations set by the council.

C. Final Examination includes:
   a. Written examination
      1. MCQ.
      2. Clinical data interpretation candidates must pass the final written examination before they can set for the final clinical examination.
   b. Clinical examination may include any or all of the following:
1. Long case.
2. Short cases.
3. Oral.

c. The candidate should pass each section of the final examination independently. Failures will be subject to the rules and regulations set by the council.

VIII. CERTIFICATION

Upon successful completion of the required training and passing the final examination, Saudi certificate of the subspecialty will be conferred upon the candidate.

### TABLE 1
**REQUIRED NUMBER OF PROCEDURES**

During the First Year

<table>
<thead>
<tr>
<th>No</th>
<th>PROCEDURE</th>
<th>REQUIRED NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Upper GIT endoscopy with Bx</td>
<td>200</td>
</tr>
<tr>
<td>2</td>
<td>Sigmoidoscopy</td>
<td>30</td>
</tr>
<tr>
<td>3</td>
<td>Liver biopsy</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>Manometry</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>pH monitoring</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>Paracentesis</td>
<td>30</td>
</tr>
</tbody>
</table>

### TABLE 2
**REQUIRED NUMBER OF PROCEDURES**

During the Second Year

<table>
<thead>
<tr>
<th>No</th>
<th>PROCEDURE</th>
<th>REQUIRED NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Upper GIT endoscopy with Bx</td>
<td>200</td>
</tr>
<tr>
<td>2</td>
<td>Colonoscopy with Bx</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Sigmoidoscopy</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>Endoscopic polypectomy</td>
<td>20</td>
</tr>
<tr>
<td>No</td>
<td>PROCEDURE</td>
<td>REQUIRED NUMBER</td>
</tr>
<tr>
<td>----</td>
<td>-----------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>1</td>
<td>Upper GIT endoscopy with Bx</td>
<td>200</td>
</tr>
<tr>
<td>2</td>
<td>Colonoscopy with Bx</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Sigmoidoscopy</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>Endoscopic polypectomy</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>Endoscopic hemostasis:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Variceal</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Non-variceal</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Esophageal Dilation</td>
<td>15</td>
</tr>
<tr>
<td>7</td>
<td>PEG</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>Liver biopsy</td>
<td>30</td>
</tr>
<tr>
<td>9</td>
<td>Manometry</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>PH-monitoring</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>Paracentesis</td>
<td>30</td>
</tr>
<tr>
<td>11</td>
<td>ERCP</td>
<td>10</td>
</tr>
</tbody>
</table>

**TABLE 3**

**REQUIRED NUMBER OF PROCEDURES**
During the Third Year
APPENDIX

Training Center Accreditation Requirements

For a hospital to be accredited to offer a Fellowship training program, it should fulfill the following requirements:

1) Gastroenterology training must take place only on medical institution accredited for Internal Medicine training by the Saudi.

2) Faculty:
   The program must include a minimum of three full-time faculty members (consultants) including the Training Director.

3) Facilities and resources:
   The following are essential for the training program:
   i. adequate number of new and follow-up patients to ensure adequate exposure to Gastroenterological problems.
   ii. In-patients and ambulatory care facilities.
   iii. Fully equipped facilities and staff for both diagnostic and therapeutic procedures, and laboratory facilities suitable for performing specialized serological, immunologic, metabolic, parasitologic and toxicological studies applicable to Gastroenterology and Hepatobiliary disorders.
   iv. Supporting services such as diagnostic and interventional Radiology Unit, Emergency Services, and Pathology Laboratory.
v. A well-stocked library with the facility for Literature search.

4) **diagnostic and Therapeutic Facilities:**
Each center should be capable of performing an adequate number of endoscopic procedures. The following are the minimum number of Endoscopic procedures expected to be performed annually:

- 1000 Gastroscopies.
- 200 Colonoscopies.
- 200 ERCP.

**In addition to:**
- Liver biopsies
- Ultrasound
- Motility studies
- Percutaneous Endoscopic
- Gastrostomies (PEG) etc.

5) **Integrated Clinical Activities:**

- Morbidity and Mortality Meetings.
- Daily morning meetings.
- Pathology session.
- Imaging session.
- Surgical conferences.