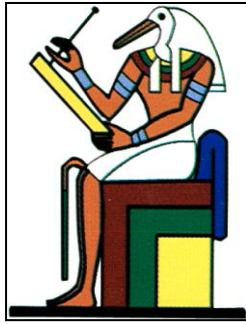
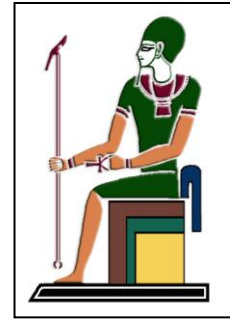


**Faculty of Medicine - Cairo University
Program Specifications MD vascular Surgery**



Cairo University



Faculty of Medicine

**Program Specification
M.D. Degree
Vascular SURGERY**

Department of vascular Surgery

2016-2017

Faculty of Medicine - Cairo University

Program Specifications MD vascular Surgery

Cairo University
Faculty of Medicine
Department of vascular surgery

Program Specifications MD Degree in vascular SURGERY

Program type: single

Program code: SURG 912

Department offering the program: Department of vascular surgery.

Chairman of the program: Head of the department

Professor Dr Hassan Soliman

Total credit points: 110 points

Academic year: 2010/2011

Program Coordinators: Professor Dr Omar El Kashef

Professor Dr Sherif Balbaa

Last date of program specifications

I. Program aims

The aim of the program is to provide the community with competent vascular surgeons at the highest level of the cognitive domain capable of problem solving and generating genuine solutions for surgical problems in a safe, ethical and professional manner. They have to be at the highest level of vascular surgical skills including open and endovascular techniques . As most of them will teach and conduct scientific research, the program aims at developing such competence. Advanced teaching capabilities is expected from candidates affiliated to universities and teaching hospitals, whereas advanced research capabilities is required from potential future lecturers affiliated to universities at the end of the program.

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II. Intended Learning Outcome (ILOs):

A) Knowledge and Understanding :

By the end of the program the candidate should be able to:

- 1) Integrate basic science knowledge-including anatomy, physiology and pathology to the practice of vascular surgery.
- 2) Recognize the clinical manifestations, complications, diagnostic modalities, outcomes and treatment plans for common and/or important vascular surgical problems, with special emphasis on emergencies and malignancies.
- 3) Choose the proper methods of screening and early detection of vascular disease .
- 4) Recognize the ethical principles that govern decision-making in vascular surgical practice.
- 5) Recognize medico legal aspects in vascular surgical practice.
- 6) Recognize the principles of preoperative preparation and postoperative care.
- 7) Recognize of research methodology.
- 8) Define principles of clinical audit.

B) Intellectual skills:

By the end of the program the candidate should be able to:

- 9) Perform and analyze a complete medical history and physical examination.
- 10) Perform and analyze an emergency-directed examination for patients with common vascular surgical emergencies.
- 11) Utilize sources of information like medical records, patient's family/friends to augment medical history.
- 12) Interpret patient symptoms and physical findings in terms of their anatomic, pathologic and functional diagnostic significances.
- 13) Solve problems, and generate a list of differential diagnosis for each problem.
- 14) Select the most appropriate and cost-effective diagnostic and therapeutic procedure for each problem.
- 15) Interpret the results of commonly used diagnostic procedures
- 16) Use the results of all the tests ordered to modify the problem list and the differential diagnosis accordingly.
- 17) Combine the clinical and investigational database, with the evidence-based knowledge and the skill of deductive reasoning to be proficient in clinical problem-solving.

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18) Evaluate the effectiveness of therapy by identifying clinical and investigative parameters to be used in assessing the patient's response to treatment and re-evaluate management plan accordingly.

19) Identify and select patients with life/organ-threatening vascular surgical conditions and perform appropriate therapy.

20) Plan and properly present a research project.

C) Professional and practical skills (technical abilities):

By the end of the program the candidates should be able to:

21) Take and record a structured patient-centered history in acute and chronic conditions.

22) Perform full physical examination appropriate to age and gender in acute and chronic clinical conditions

23) Provide first aid measures (Resuscitate) for emergency patients; injured and /or critically-ill

24) Compose an initial plan of management for stabilization of injured and critically-ill patients

25) Construct appropriate management plan for patients with common and important vascular surgical diseases

26) Order appropriate investigations.

27) Perform routine bed side procedures.

28) Apply the principals of Safety and infection control guidelines

29) Provide patient care in the preoperative and postoperative periods

30) Keep and properly present patient records.

31) Search effectively electronic resources to help clinical problem solving

32) Apply basic surgical skills in the use of instruments and tissue handling.

33) Apply basic endovascular skills and endovascular procedures.

34) Perform safely the expected vascular and endovascular procedures at the end of the program

34) Prepare efficiently presentations and journal clubs.

D) Professional Attitude and Behavioral Skills:

By the end of the program the candidates should be able to:

35) Conduct sincere and effective patient interviews, properly explain the condition and-plan of management, obtain informed consents and convey bad news in a professional way.

36) Adopt an empathic and holistic approach to patients and their problems, taking into consideration beliefs values, goals and concerns

37) Respect Patients confidentiality and deliver care in an honest, considerate and compassionate manner

38) Work as an effective and cooperative team member.

39) Communicate, consult and respect the role of other health-care providers.

40) Respect and follow the institutional code of conduct.

41) Apply the principles and ethics of research study.

42) Apply the ethical principles related to organ donation.

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43) Explain professional errors in an honest way.

III. Academic Standards.

1. Academic reference standers: The academic standers of anatomy program m is adopted and accredited by the departmental council
2. External References for Standards:

SVS (Society of vascular surgery of North America)

IV. Program Structure and Contents.

a) Program admission requirements

According to the bylaws of the Faculty of Medicine Cairo University applicants should have MBCh and MS of General Surgery. Admission to the program is open twice in October and March. Training prior to registration may be accredited according to departmental evaluation.

b) Program duration: Two years

c) Program structure: Total Credit points 110 points

Compulsory Vascular course 90 points	40 M.D. Thesis 47 Clinical and practical training 3 Scientific activities
Elective vascular surgery courses 20 points	10 radiology 10 hematology

NB: 1credit point= 15 lectures (one hour each) or 30 hours of surgical training.

d) Training Program

According to the new Bylaws, July 2009 for post graduate programs, all the students should have a general surgical training for 2 years.

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e) Scientific Activities:

The candidate should participate in the scientific activities of the departments such as:

- Journal club (presenting scientific articles) once every two weeks.
- Seminars (including recent topics and controversial issues) once weekly. Students are expected to participate in the discussions.
- Scientific meetings arranged by the department.
- Attendance of Thesis discussions (2 per year).
- Courses in basic and advanced vascular and endovascular in LRC (learning resource center).
- Courses in basic and advanced Vascular emergencies.

NB: Each activity will be monitored and given credit points registered in a logbook. The candidate should collect the required points before being allowed to sit for final exam.

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1	Embryology
2	Arterial Wall Biology
3	Atherosclerosis
4	Intimal Hyperplasia
5	Ischemia-Reperfusion
6	Arterial Aneurysms
7	Arteriogenesis
8	Thrombosis and Hemostasis
9	Anti thrombotic Agents
10	ARTERIAL HEMODYNAMICS
11(A)	Arterial Physiologic Assessment
11(B)	Angiography for Vascular Surgeon
12 (A)	Basic Technique: Open Surgical
12 (B)	Basic Technique: Endovascular
12 (C)	Basic Technique: Aortic Stent
13	Perioperative Management
14	Systemic Complications
15	Local Complications
16	Lower Extremity Arterial Disease
17	Aortoiliac Disease
18 (A)	Infrainguinal Disease: Femoropopliteal Disease
18 (B)	Tibioperoneal Disease and Ischemia of The Foo
19	Diabetic Foot Ulcers
20	Lower Extremity Amputation

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No.	Chapter
1.	Chapter 21: Extracranial Cerebrovascular Disease: General consideration
2.	Chapter 22: Management Of Carotid Artery Disease: Endarterectomy
3.	Chapter 23: Endovascular Treatment of Carotid Disease
4.	Chapter 24: Cerebrovascular Disease: Miscellaneous Subjects
5.	Chapter 25: Brachiocephalic Artery Disease: Surgical Treatment
6.	Chapter 26: Upper Extremity Arterial Disease General Considerations and Small Artery Disease
7.	Chapter 27: Thoracic Outlet Syndrome
8.	Chapter 28: Operations for Upper Limb Diseases
9.	Chapter 29: Non Atherosclerotic Causes of Chronic Ischemia
10.	Chapter 30: Renovascular Disease
11.	Chapter 31: Renovascular Disease: miscellaneous subjects
12.	Chapter 32: Mesenteric ischemia
13.	Chapter 33: Arterial Aneurysms: General Considerations
14.	Chapter 34: Abdominal Aortic Aneurysms: Endovascular Treatment
15.	Chapter 35: Ruptured Abdominal Aortic Aneurysms
16.	Chapter 36: Aortic Dissection
17.	Chapter 37: Thoracic and Thoracoabdominal Aneurysms
18.	Chapter 38: Peripheral Aneurysms
19.	Chapter 39: Arterial Aneurysms- Miscellaneous Subjects
20.	Chapter 40: Vascular Trauma
21.	Chapter 41: Acute Limb Ischemia
22.	Chapter 42: Deep Vein Thrombosis
23.	Chapter 43: Varicose Veins
24.	Chapter 44: Chronic Venous Insufficiency
25.	Chapter 45: Acquired Arteriovenous Fistulae
26.	Chapter 46: Hemodialysis Access
27.	Chapter 47: Congenital Vascular Malformations
28.	Chapter 48: Miscellaneous Subjects

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VI. Evaluation

According to the bylaws, professors carry continuous assessment during the program. A periodical report has to be submitted twice per year. A training program logbook will be kept for each candidate to document all his/her clinical, laboratory and/or operative/procedural activities as well as his/her participation in different scientific activities. The head of the department allow the candidate to undergo the final examination when they complete their training program, collect the credit points needed and pass the predoctor degree assessment exam. Those who fail the M.D. exam 5 times have to attend the postgraduate course and pass the predegree exam.

VII. Assessment of the M.D. Degree In General Surgery

Examination of the MD degree in general surgery entails:

- Written examination
- Clinical examination
- Oral examination
- Operative skills and anatomy

A-Written examination:

This entails 5 paper examinations.

2 papers in vascular surgery cover all fields of vascular surgery including vascular, and endovascular surgery. All sorts of questions may be included e.g. long essay questions, short answer questions, problem solving questions and MCQ.

A commentary paper including not less than 2 cases (80 marks) and a 4th paper in anatomy and pathology(60 marks).5th paper in elective courses (80 marks).

The examinations will be conducted by members of vascular surgery department.

B- Clinical examination:

The score of this examination is 100 marks. A long case for 50 marks, short cases for 50 marks.

C- Oral examination:

The score of this examination is 100 marks. It includes

- Oral surgical x-ray for 80 marks.
- Surgical instruments for 20 marks.

D-Operative skills and anatomy:

The score of this examination is 100 marks. It includes

- Oral anatomy examination for 32 marks.
- Operative talk for 40 marks (including open and endovascular).
- Operative technique for 20 marks.

VIII. Thesis (20 credit points)

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- The candidate should conduct a thesis research about one of the subjects related to vascular Surgery. The subject of the thesis is chosen by a supervisor professor of the candidate. The subject of the thesis should be approved by a special committee chosen by the council of the vascular Surgical Department.
- The candidate performs a review of literature about his work. He collects data either from the internet or from the international journals or papers.
- The practical part of the work is performed under the supervision of two professors; one of them should be a vascular Surgeon. If the subject of the thesis entails an experimental part, this can be performed in the experimental department of the Faculty.
- After the candidate finishes the practical work, he writes the thesis under the supervision of his professors. The framework of the thesis consists of an abstract, introduction or review of literature, patients and methods, results, analysis of results, discussion, summary, conclusions and references.
- Discussion of the thesis is performed by a committee of three professors; one is from the two professors who supervised the work, a second examiner from the Faculty of Medicine, Cairo University, and the third is an external examiner from another Faculty of Medicine in Egypt.
- If the three examiners are satisfied, the candidate gets a certificate that he got his thesis.

M.D. DEGREE: IN VASCULAR SURGERY

A candidate who succeeded in the examinations mentioned before and whose thesis was certified is offered the **M.D.** degree in vascular Surgery Faculty of Medicine, Cairo University

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IX. Evaluation of program intended learning outcomes:

Evaluator	Tool	Sample
1. Candidates	Questionnaire at the end of the program	Candidates
2. Beneficiaries	A meeting will be arranged during the annual conference of the department	Available representatives from: <ul style="list-style-type: none">• Army hospitals• National medical insurance• Medical syndicate• Ministry of health
3. External Evaluators	Review the program and courses Attend the final exam.	Once before implementation Bi-annual report
4. College Quality Assurance committee	Annual program review	

Chairman of the program: Head of the department
Professor Dr Hassan Soliman

Program Coordinators: Professor Dr Omar El Kashef
Professor Dr Sherif Balbaa

Date of approval by Department Council