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# General Surgery's Education in Turkey

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Like in every other country the primary purpose of the specialization for general surgery is to provide occupational ability for residents in Turkey. Due to this fact, the education programme aims to make residents gain knowledge, ability and manners which are necessary for the expert to do his job. In Turkey, duration of the general surgery residency is 5 years. The programme may be given in Education and research hospitals, the state university hospitals, the foundation hospital, military education hospitals and private hospitals.

## GENERAL SURGERY RESIDENTS:

They are the people who suit the description that is in the 2nd item of Medical Science Expertness Regulations which was published on the official newspaper on 23 rd November 1987. They also have to graduate from the medical school with a good average. Medical students has to pass an national medical exam called 'TUS' to be able to get into specialization programmes. This an exam that any medical doctor can apply and is performed twice in a year. Every year about 13 000 medical doctors take this exam and only 2000 of them can succeed. The grades differ according to the branch or the hospital of choice

## MAIN ABILITIES:

The general surgery education provides the asistant to know, to do, and to behave in a suitable way. Objectives of the whole programme as follows.

- to gain a fair judgement and a perfect ethical manner that is appropriate for a perfect surgeon.
- to respect the patients and their relatives' social and cultural values when treating.
- to use the information that he has learned for the treatment of surgical diseases.
- when performing the surgical techniques to show the ability that is expected from a surgeon.
- to consider different points of view when making critical decisions that might affect the patient and his relatives' lives.
- to contribute for developing the community health and protective medicine.
- to communicate in an effective way with his colleagues.
- to share his knowledge with his colleagues, assistants and students.
- to educate patients and their families about the health of community.
- to make an effort for caring about the patients and their surgical treatments with a suitable cost.
- to see the learning as a provision for the continuity of surgical education.

## OFFICIAL ROTATIONS:

All of the General Surgery Residents complete his clinical rotations at stated disciplines in estimated times determined by the academic board of General Surgery Department as stated below:

Anesthesia and Reanimation; 2 months, Pathology;



1 month, Orthopedics; 1 month, Thoracic Surgery; 1 month, Gynecology and Obstetrics; 1 month, Urology; 1 month, Pediatric Surgery 1 month, Plastic and Reconstructive Surgery 1 month, Cardiovascular Surgery 1 month.

At the end of this duration, each of these department prepares student performance evaluation form for the resident.

## RESIDENCY TRAINING PROGRAM AND REQUIREMENTS:

### First Year (0. - 2. Months):

In the first two weeks, incoming resident does not have night duty. The department and the hospital is introduced to him by senior residents or faculty members. Residents get to know the routine working principles inside and outside the clinic both theoretically and practically. During every duty, each resident is responsible to his superior.. Residents are obligated to prepare each of inpatient's record without defect. He follows laboratory tests of the inpatients in person and concludes them. In visits resident applies and records essential order changes under the confirmation and knowledge of his senior residents. He follows patients' clinic courses closely both during working hours and the night duties; before morning and evening visits he presents information about patient's recent progress to his head assistant. He takes part in both morning and evening visits, and he records suggested order changes and necessary duties for patients. He performs daily dressings of the wounds and wound care. He writes down important progresses of the patients to patient records. He arranges necessary preparations of the patients before operation. He prepares epicrisis and patients' discharge papers. Residents stay in the clinic during first 2 months and performs bedside transactions such as simple suturation, urinary and nasogastric catheterisation.

### First Year ( 3. - 12. Months ):

Apart from the duties stated above with the begin-

ning of the third month he is located in operating room as the member of the surgical team and observe post-operative patients. He attends preparation of the operating theater and assists operations if it is needed. During his first year, resident performs bedside transactions such as performing cut-down, simple suturation, urinary and nasogastric catheterisation or santral venous catheterisation. Under the observation of his superior resident he performs soft tissue excision under local anesthesia and simple operations like pilonidal cyst excision, laparotomy and appendectomy.

### Second Year:

In addition to his duties stated above, residents determine the tasks of his junior residents during the night duties and observe them doing it. While working hours, residents accomplish the tasks given by his head assistant. He assists his head-resident in all duties. He examines patients in General Surgery Clinic, performs the necessary treatment and follow-ups. He assists preparation of the patients for operation, observation records during and after the performance in the Endoscopy Unit and takes care of the equipment's maintenance. He participates in operations performed under both local and general anesthesia in the operating theater. In addition to the operations mentioned, resident performs splenectomy, open cholecystectomy, incisional hernia repair, primary repair of duodenal ulcer, subareolar exploration, breast lumpectomy, gastrotomy, jejunostomy and colostomy operations and laparoscopic appendectomy. He starts to perform outside clinic rotations in an order. He prepares and presents oncology, breast surgery, endocrine surgery and radiology meetings.

### Third Year :

In addition to his duties stated, 3. year residents has to supervise the duties of his junior residents and makes essential interventions. He assists his head assistant for all tasks. He examines patients in General Surgery Clinic, performs the necessary treatment and follow-up. He takes part in an experimental or a clinical research. He accompanies junior residents



during the procedures they are obligated to. He tries to perform excisional biopsy of the breast, inguinal, axillary and cervical lymph node biopsies and applies peritoneal dialysis catheter. In addition to the operations he performed before, resident performs subtotal thyroidectomy, parathyroidectomy, simple mastoidectomy, reparation of the small intestines and colon, resection of the small intestines, enteroenteric anastomosis, gastroenteric anastomosis, vagotomy + drainage, segmental colonic resection, perianal abscess drainage operations. 3. Year residents decide about the subject of the thesis, protocol and presents them to the academic council for confirmation and provides the required materials. He prepares and presents oncology, breast surgery, endocrine surgery and radiology meetings.

#### **Forth and Fifth Years:**

In addition to his duties stated, residents have to supervise the duties of his junior residents and makes essential interventions. He assists his head assistant for all tasks. He checks the preparations of the patients' portfolios and medical report. He reports deficiencies to head assistant and hands in essential warnings to junior assistants. He examines patients in General Surgery Clinic, performs the necessary treatment and follow-ups. In addition to his operations in operating theatre in previous years, he operates in bilioenteric anastomosis, radical mastektomi, partial gastrektomi, right hemicolectomy, left hemicolectomy, colostomy closure, anterior resection, hemoroidektomi, sfinkterotomi, fistulotomy, liver cystectomy+omentoplasty, total tiroidektomi. He performs upper and lower GIS endoscopy in this unit. In case of absence of senior assistant he takes responsibility of head assistant's authorization confirmed by Academic Council. He knows every detail about urgent and elective situations. He is primarily responsible of checkin, treatment, follow-up and discharged procedures of the patients. He prepares final consultataions needed by outside clinics to hand in lecturers and notifies essential consultations to the clinics. He is responsible to prepare and notify operation lists to departments on the previous

day. He chooses operation teams. He is responsible for all of the operations under the supervisions of lecturers. In addition to operations and procedures he operates sphincteroplasty, adrenalectomy, distal/subtotal pancreatectomy, total gastrectomy, total colectomy, abdominoperineal resection, segmenter liver resection, hepatic lobectomy, portosystemic shunt, arteriovenous shunt . He makes his priors to write down operation notes and checks the reports. He is responsible for attending of all of the residents to training meetings. He lets lecturers to know everything about clinical events.

#### **RESIDENT EDUCATION:**

In the period of academical year some days are arranged as education days. These are case presentati- ons, mortality and morbidity meetings, with the atten- dence of pathology, oncology, radiology branches, and article and seminar hours. Also the lecturers give les- sons one day in a week to the asistants about the sub- jects that they can face while making surgical proce- dures. There is an exam about either these lessons or about surgical subjects in each year.

#### **THESIS:**

In Turkey, the asistants have to complete a research thesis. It is expected from them to determine a thesis subject at the end of the first year and to finish before starting 5th year. Apart from thesis, they join many clinical researches.

#### **PREPARATION OF THESIS:**

Every resident determine a thesis subject during his education and finishes it at the end of the fifth year. The thesis subject must belong to the general surgery and have scientific value. The hypothesis must be pro-



ved from the aspect of science and it must be suitable for the ethical rules. During the preparation of the thesis, the student should reach the scientific sources and the results on the base of science. Our general surgery service has a thesis conselor. If the thesis is experimental, the student has a rotation in the experimental searching lab for 2 months.

#### ASSESSMENT AND EXAMINATION:

The assessment of the thesis; jury that is determined before by decanery opens the thesis to the discussion verbally. Then the resident is taken for defen-

ding his thesis verbally and jury makes its certain decision.

#### SCIENCE EXAM:

The student whose thesis is accepted takes this exam. It is consisted of two parts, one of which is theoretical and second is about practical surgical skills. During the first exam, they must answer the jury's questions. In the practical exam, lecturers give a patient to resident and resident prove him self in the surgery. Resident have to pass from both exams to be a specialised medical surgeon.

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