

Curriculum

Specialist Residency Course

Department of Kidney and Urinary Tract Surgery (Urology)

Kermanshah University of Medical Sciences

**Preparation of educational content and development of
course plan:**

Dr. Hossein Abdi

Length of the residency

The duration of the urology residency is 4 years.

1-Assistants of the urology group work in three one-month rotations in the departments of general surgery, pathology, and gynecology.

2-Assistants are given two inter-departmental exams and two intra-departmental exams during the year, in addition to a promotion exam. The residents are evaluated every three months using the DOPS method by all professors, and the professional ethics score is also taken into account every three months.

3-The hours of attendance of residents at the hospital are from Saturday to Wednesday from 7:00 AM to 4:00 PM and on Thursdays from 7:00 PM to 12:00 PM.

4-The minimum monthly watch for first-year residents is 12, second-year 10, third-year 8, and fourth-year 6 watches.

Educational Objectives of the Renal and Genitourinary Surgery Program

The goal of training in the Renal and Genitourinary Surgery program is to train specialists who achieve sufficient capabilities so that at the end of the residency, they will have acquired the necessary abilities in the cognitive, practical, and attitudinal fields, and will be able to independently apply these abilities in the prevention, diagnosis, and medical and surgical treatment of diseases in this field, and by participating in relevant research and using new technologies, they will contribute to the increasing development of this specialty and ultimately contribute to improving the health of society.

Expectations from a first-year assistant

1- At the end of the first year, the resident should be able to perform basic procedures on emergency patients and, in addition to making an acceptable diagnosis, prepare patients for the operating room if necessary.

2- In emergency cases of lower urinary tract obstruction, be able to perform therapeutic procedures and have learned cystoscopy and ureteral catheterization

3- Be fully familiar with urology methods and be able to perform these procedures alone

4- Be able to examine and prepare patients for elective surgeries

5- Given the increasing development of endoscopic methods in the field of kidney and urogenital tract surgery, familiarity with the types of instruments and how to use them is of particular importance in the first year. By the end of the first year, residents should fully understand the endoscopic instruments of kidney and urogenital tract surgery, be able to work with them, and be fully aware of the use of each instrument

6- Actively participate in the training of clinical students and interns

7- Must perform the following procedures alone

- Cystoscopy and ureteral catheterization**
- Cystoscopy and Bladder biopsy**
- Urethral dilation**

- **Retrograde pyelography**
- **Urethrography**
- **Nephrostography**
- **Cystography**
- **Percutaneous cystostomy**
- **Ability to suture wounds, close lateral and subumbilical incisions outside the peritoneum and scrotum**
- **Simple orchiectomy**
- **Testicular biopsy**
- **Circumcision**
- **Vasectomy**
- **Prostate biopsy without ultrasound**
- **Adult hydrocelectomy**
- **Mastotomy**
- **Mastoplasty**
- **Penile biopsy**
- **Treatment of paraphimosis**
- **Open cystostomy**
- **Bladder stones with open surgery**
- **Epididymal cyst**
- **Varicocelectomy**

- **Bladder lavage and clot evacuation**
- **and the like**

Expectations from a second-year assistant

-The prerequisite for entering the second year is to obtain the required score in the promotion exam.

- By the end of the second year, residents should have the following abilities:

- 1- **Ability to recognize emergencies and prepare patients for surgery**
- 2- **Familiarity with complications after elective surgery and postoperative measures**
- 3- **Familiarity with surgical procedures and how to diagnose them**
- 4- **Preparing high-risk patients for surgery**
- 5- **Independently perform the following procedures**
 - **Open prostatectomy**
 - **Mid-ureteral stone surgery**
 - **Percutaneous nephrostomy**
 - **Herniotomy**
 - **Radical orchiectomy**
 - **Ductal caruncle surgery**
 - **Herniorrhaphy**
 - **Dilation of mild ductal stricture**
 - **Making and closing midline incisions**
 - **Making lateral and infraumbilical incisions**
 - **And treating their complications ESWL-**
 - **Upper ureteral stone**
 - **Orchidopexy and correction of testicular torsion**
 - **Female ductal cyst surgeries**

- Creating a shunt between the corpus cavernosum and the corpus spongiosum through a needle
 - Pediatric cystoscopy and pediatric catheterization
 - Ductal dilation with severe strictures
 - Genital warts
- 6- Actively participated in surgical procedures related to older years as first aid

Expectations from a third-year assistant

- 1- Obtaining the required quorum in the promotion exam
- 2- Gaining skills in dealing with patients, preparing patients for surgery, preoperative diagnosis, choosing the type of surgery, and knowing the complications after surgery
- 3- Familiarity with the management and administration of the department and practicing it in terms of holding meetings such as tumor board, morning report, mortality, and accountability in these meetings
- 4- Ability to prepare a list of operations according to the duration and type of surgery and awareness of the surgical position
- 5- Ability to independently perform the following surgical procedures:
 - (Pyelolithotomy) single stone
 - Perineal urethrostomy
 - Epididymectomy
 - Simple nephrectomy
 - Repair of distal hypospadias with a flap (Mathew)
 - Repair of penile fracture
 - Open nephrostomy
 - Drainage of renal or perirenal abscess
 - Injection of drugs and substances through an endoscope
 - Urethrectomy (removal of the urethra)
 - Thoracoabdominal incision, perineum,

- Posturelolumbotomy
- Endoscopic bladder biopsy
- Internal urethrotomy
- Cystolithopexy
- Partial cystectomy
- Penile trauma repair
- Types of cavernous shunts (open surgery)
- Short ureterostomy
- Urethroscopy
- Lower ureteral stones
- Simple urinary fistulas
- TURP and TUIP-

MAGPI-

TUL-

PUV removal-

TURBT-

UPJO-repair

Expectations from a fourth-year assistant

- 1- Obtain the quorum for promotion to the fourth year
- 2- Practice managing the department's administration
- 3- Play an active role in the training of junior year residents like a professor
- 4- Be able to supervise all surgical procedures performed by junior year
- 5- Be able to independently perform the following procedures
 - Simple urethroplasties
 - Radical nephrectomy without vascular involvement

- **Cystoplasty**
- **Proximal and midshaft hypospadias**
- **Urethrocele surgery (open procedure)**
- **Surgical procedures for kidney damage**
- **Vasovasostomy**
- **Pediatric kidney stones**
- **Anatrophic nephrolithotomy**
- **Nephroureterectomy with bladder cuff removal**
- **Antireflux surgery**
- **Surgery for prostate cancer**
- **Diagnostic laparoscopy**
- **Epispadias without exstrophy**
- **Radical prostatectomy**
- **Nephrectomy with kidney transplantation**
- **Urethrolysis**
- **Difficult kidney stones and operations**
- **Female diverticulitis surgeries**
- **Partial nephrectomy**
- **Complex and large recurrent urinary fistulas**
- **Difficult radical nephrectomy with vascular involvement**
- **Complex urethroplasty**
- **Kidney tumor excision and kidney preservation in small tumors**
- **Adrenal masses and retroperitoneal masses**
- **Stress incontinence surgery in women**
- **Types of ureteral interposition**
- **Vascular reconstructive surgery related to kidney and urinary tract surgery and donor nephrectomy and autotransplant**

- **Radical cystectomy and types of diversion such as ileal loop and orthotopic**
- **Repair of pediatric ureteropelvic stenosis**
- **RPLND**