

## Curriculum ,Clinical Urology and Paediatric Urology'

### 1. Mandatory courses

Practical exercises in General Urology; fourth year (8. semester),  
Friday 1400-1800, Saturday 800-1200 h

### 2. Lectures

Clinical Urology, lecture and case demonstration; fourth year (8. semester),  
Thursday 1700-1800 h

### 3. Examination/evaluation

Written examination, after completion of the 8. semester; 5 case studies, 30  
questions/items (multiple choice)

### 4. Objectives

1. Pathophysiology, symptomatology, therapeutic principles
  - Acute and chronic renal failure
  - Impaired urinary drainage/hydronephrosis
  - Renal hypertension
  - Voiding dysfunction
2. Clinical signs and symptoms
  - Impaired micturition/bladder dysfunction (outlet obstruction, overactive bladder, incontinence)
  - Gross and microscopic hematuria
  - Pain (flank pain, dysuria, scrotal pain)
3. Diagnostic tests
  - Bacteriology, blood screen, tumor markers
  - Imaging (sonography, computed tomography, magnet resonance imaging, iv-urogram), specific uro-radiologic studies (cystogram, antegrade/retrograde urethrogram, retrograde ureteropyelogram, voiding cysturethrogram)
  - Renal scintigram
  - Urine cytology
  - Endoscopy (cystoscopy, ureterorenoscopy)
  - Transrectal ultrasound guided biopsy of the prostate
  - Urodynamic investigations including video-urodynamics
4. Urological therapy
  - Surgery (anatomy, access, basic principles, principles of laparoscopy, oncologic surgery, organ-sparing surgery)

Reconstructive urology (pyeloplasty, urethroplasty, fistula repair), urinary diversion (temporary, intermediate, definitive; conduit, ureterosigmoidostomy, rectal reservoirs, continent cutaneous diversion/pouches, orthotopic bladder substitution/neobladder, bladder augmentation)  
Transurethral procedures (transurethral resection of the prostate, transurethral resection of bladder tumors, insertion of ureteral stents, urethrotomy)  
Extracorporeal shockwave lithotripsy  
Interventional therapy of urolithiasis (ureterorenoscopy, percutaneous litholapaxy)  
Pharmacotherapy (erectile dysfunction, voiding dysfunction, overactive bladder)

5. Congenital anomalies

Renal anomalies (aplasia, rotated kidney, pelvic kidney, horseshoe kidney, multicystic disease, polycystic disease)  
Ureteral anomalies (retrocaval ureter, pelviureteric junction obstruction, megaureter, ureterocele, ectopic ureter, vesicoureteric reflux)  
Bladder, urethral anomalies (hypospadias, epispadia/exstrophy, epispadias, diverticula, urachus)  
Genital anomalies (micropenis, varicocele, phimosis, cryptorchidism, hydrocele)  
Neuroblastoma, Wilms tumor, rhabdomyosarcoma

6. Infection/inflammation (epidemiology, symptomatology, diagnosis, therapy)

Pyelonephritis, abscess, perinephritic abscess, interstitial nephritis)  
Interstitial cystitis  
Urinary tract infections (cystitis, urethritis)  
Acute and chronic prostatitis  
Orchitis, epididymitis  
Urogenital tuberculosis

7. Oncology (epidemiology, symptomatology, diagnosis, therapy)

Renal cell cancer  
Transitional cell cancer of ureter and/or renal pelvis  
Bladder cancer  
Penile cancer  
Testis cancer (seminoma, non-seminoma)  
Prostate cancer

8. Urolithiasis
  - Common forms of calculi (calium, uric acid, cystine, infection)
  - Aetiology
  - Differential therapy of renal calculi
  - Differential therapy of stones in the ureter
  - Medical treatment of urolithiasis, metaphylaxis
  
9. Urologic trauma (symptomatology, diagnostic modalities, therapy, complications)
  - Kidney (contusion, laceration, rupture, fragmentation)
  - Urinary bladder (intra-, extraperitoneal rupture)
  - Urethra (partial/total rupture)
  
10. Adrenal glands
  - Cushing's syndrome
  - Conn's syndrome
  - Virilizing tumors
  - Neuroblastoma
  - Pheochromocytoma
  - Adrenocortical cancer
  
11. Andrology
  - Impaired fertility
  - Erectile dysfunction
  
12. Urogynaecology
  - Urinary incontinence
  - Urinary fistulae
  - Urologic complications during pregnancy
  
13. Neuropathic bladder
  
14. Urologic emergencies
  - Acute urinary retention, anuria
  - Acute hydronephrosis, colicky pain
  - Acute scrotal pain/testicular torsion
  - Priapism
  - Paraphimosis
  - Urosepticaemia
  
15. Renal transplantation
  - Indications, contraindications
  - Cadaver/living related
  - Surgical technique

Immunosuppression  
Postoperative complications