

Topics for Pediatric Sub-specialty Exam and Lifelong Learning

Total Exam 150 Questions

I. General –

44 questions – 29%

- Anatomy **(9 questions)**
- Core Competency **(8 questions)**
 - Radiation Safety
 - Patient Safety include (DVT, antibiotic prophylaxis, opioid addiction)
 - Ultrasound Techniques
 - Radiation Safety
 - Ethics
 - Basic Statistics
- Fluid and Electrolyte management in children **(3 questions)**
- Infection & Inflammatory processes involving GU Tract **(14 questions)**
 - UTI- Dx and management
 - Rx and significance of reinfection vs relapsing UTI
 - Pyelonephritis – Diagnosis and management
 - Xanthogranulomatous pyelonephritis
 - Kidney Abscess
 - Kidney scarring –Diagnosis and associated complications
 - Henoch- Schonlein -Urologic manifestations
 - Crohn’s Disease – Urologic manifestations
 - Lichen Sclerosus- Diagnosis and treatment
 - Epididymitis Diagnosis and treatment
 - Funguria - Diagnosis and treatment
 - Balanoposthitis, Phimosis – Diagnosis and treatment
 - Pediatric Vulvovaginitis
 - Vaginal adhesions - Treatment
 - Sexual Transmitted Disease in adolescence
 - HPV vaccine
 - Antibiotic prophylaxis
 - Infections in urachal remnant and/or utricle

- Trauma (6 questions)
 - Post renal trauma follow up, HTN, imaging guidelines.
 - Testicular trauma
 - Post circumcision injury
 - Traumatic urethral stricture management
 - Penetrating trauma

- Transplant, Preop Evaluation, Complications (4 questions)

II. Congenital Anomalies and Embryological defects – 34 questions – 23%

- Cloacal anomalies- common Urogenital sinus management
- Congenital adrenal Hyperplasia
- Cryptorchidism (anorchia)
- Disorders of Sexual Differentiation
- Ectopic Ureters
- Epispadias-Exstrophy Complex
- Epididymal and Vasal anomalies
 - Vasal agenesis- cystic fibrosis
- Gender dysmorphia
- Hydrocele
- Hydroculpos (Mullerian Duct abnormalities)
- Hypospadias
 - Enlarged prostatic utricle
- Imperforate Anus – associated GU anomalies
- Prune Belly Syndrome
 - Congenital megalourethra
- Testicular torsion (neonatal and Intravaginal)
- Renal Agenesis
- Renal Fusion anomalies
 - Horseshoe kidneys cross fused ectopy
- Renal cystic disease of childhood
 - Multicystic dysplastic kidneys
 - Autosomal recessive kidney disease
 - Autosomal dominant kidney disease

- Urachal Abnormalities
- Varicoceles
- Vesicoureteral reflux
 - Robotic complications of VUR surgery
 - Procedures for failed reimplant or subureteric implant (late)

III. Pediatric Obstructive Uropathy

20 questions (13%)

- Antenatal Hydronephrosis
 - Differential Diagnosis and treatment
 - Complications of in utero management
- Posterior and anterior urethral valves Diagnosis and treatment
 - Vesicostomy when to do and complications of vesicostomy
- Primary Obstructing Megaureter Diagnosis and treatment
- UPJ obstruction Diagnosis and treatment
- Ureterocele - Diagnosis and treatment
 - Duplex system, management of VUR
 - Single system
- Physiologic alterations from obstruction
 - Post-obstructive diuresis - Diagnosis and treatment
 - Nephrogenic Diabetes Insipidus

IV. Neurogenic Bladder and Voiding Dysfunction

20 Questions (13%)

- Dx –UDS assessment of Neurogenic bladder
- Etiologies of Neurogenic bladder in children
 - Cerebral palsy
 - Diagnosis and treatment
 - Spina bifida
 - Diagnosis and treatment, prenatal risk factors
 - Spinal cord injuries

- Diagnosis and treatment
- Tethered Cord
- Diagnosis and treatment
- Pharmacologic and Surgical treatment Neurogenic bladder
 - Urodynamics interpretation
 - CIC
 - Overnight catheter drainage
 - Antimuscuranics
 - Onobotulinum Toxin
- Bladder and Bowel dysfunction
- Diagnosis and treatment
- Neural Stimulation
 - Sacral Nerve stimulation
 - Percutaneous Tibial nerve stimulation
- Management of Neurogenic Bowel
 - Bowel Irrigations
 - ACE indications and complications

V. Pediatric Neoplasms/Urinary diversion

12 questions (8%)

- Neoplasms (Benign and Malignant) **(4 questions)**
 - Renal
 - Mesoblastic Nephroma
 - Wilms tumors - Diagnosis and treatment
 - Congenital anomalies associated with Wilms Tumors e.g.,
Deny Drash, Aniridia, Hemihypertrophy
 - Clear Cell Sarcoma of the kidney - Diagnosis and treatment
 - Rhabdoid tumor of kidney: Diagnosis and treatment
 - Tuberous sclerosis- angiomyolipoma
 - Von Hippel Landau
 - Renal cell carcinoma of childhood
 - Testicular tumors of childhood and adolescence: Diagnosis and treatment
 - Yolk sac
 - Teratoma
 - NSGC tumors in post pubertal patient
 - stromal tumors (Leydig cell tumors)

- Adrenal rest in congenital adrenal hyperplasia
 - Epidermoid cysts
 - Rhabdomyosarcoma: Diagnosis and treatment
 - Bladder and prostate
 - spermatic cord
 - vagina (sarcoma botyroides)
- Urinary Diversions and Augmentations **(8 questions)**
 - Indications and segments used for bladder augmentation
 - Complications of augmentations
 - Rupture
 - Electrolyte and vitamin abnormalities
 - Renal Preservation
 - Bladder stones management and prevention
 - Assessment of post augment urinary incontinence
 - Complications and management of continent stomas
 - Bladder Neck reconstruction or slings with or without augmentation
 - Vesicostomy management of complications
 - Indication and complications of urinary conduits.
 - Artificial Urinary Sphincter- Indications and complications

VI. Endourology, Nephrology and Lap/Robotic complications –

20 questions (13%)

- Nephrolithiasis- Rx **(10 questions)**
 - Percutaneous nephrolithotomy – indications and technique
 - ESWL – indications
 - Ureteroscopy indications and technique
 - Recommended follow-up after stone removal
- Metabolic work-up for stone disease
 - Dx and Rx based on metabolic work up
 - Heredity (genetic) causes for nephrolithiasis
- Nephrology **(3 questions)**
 - Microscopic hematuria(workup)
 - Gross hematuria of Neonate - Diagnosis and treatment
 - Hypercalciuria of infancy

- Renal Vein thrombosis
 - Renal Artery Thrombosis
 - Proteinuria – Diagnosis and significance
 - Identification of glomerulonephritis
 - Casts- Crenated RBC
 - Post infectious GMN
 - COMMON NEPHROTOXIC MEDICATIONS in pediatrics
- Complications of Endourology and Laparoscopy-Robotics **(7 questions)**
 - Ureteral stricture post ureteroscopy - Diagnosis and treatment
 - Ureteral perforation - Diagnosis and treatment
 - PCN complications
 - Bleeding
 - Bowel perforation
 - Urinoma
 - ESWL- complications
 - Robotic and laparoscopic common complications
 - Diminished blood flow
 - Reduced urine output
 - Air embolism
 - Complications of trocar placement
 - Management of failed robotic case/urine leak/bowel injury