

Renal Module

(2 weeks)

Prepared by

Khyber Girls Medical College Peshawar

Module themes

S. No	Theme	Duration in hours
1	Facial swelling	4
2	Scanty Urine	6
3	Loin pain and dysuria	5
4	Pain and swelling of external genitalia	5

*A minimum of 4 hours daily must be allocated for clinical teaching and training at bedside in different units as specified by the Pakistan Medical Commission

General learning outcomes

At the end of this module, the students will be able to:

- 1) Discuss the diagnostic approach and management of an adult and a child with suspected glomerular disease
- 2) Discuss the diagnostic approach and management of an adult and a child with acute and chronic renal disease
- 3) Discuss the management of a patient with nephrocalcinosis
- 4) Discuss the etiology, clinical features, and management of common electrolyte abnormalities
- 5) Explain the diagnosis and management of a patient with hematuria and UTIs
- 6) Explain the common diseases of the urogenital system
- 7) Take history and perform a physical examination of urogenital system
- 8) Counsel a patient with acute and chronic renal failure

Subject	Topic	Hours	S. No	Domain of learning	Learning objective <i>At the end of this session, the students of year 5 will be able to:</i>
Theme 1: Facial swelling					
Medicine/Nephrology	Investigations of renal diseases	1	1	Cognitive	Discuss the biochemical, radiological, hematological and other specialized investigations and their interpretations in renal diseases
	Approach to a facial swelling		2	Cognitive	Discuss the diagnostic workup and management approach for a patient with facial swelling of renal origin
			3	Psychomotor	Take history and perform physical examination of patient with facial swelling
	Minimal change disease	1	4	Cognitive	Explain the diagnostic workup and management and complications of a patient with Minimal change disease
	Post streptococcal Glomerulonephritis		5	Cognitive	Explain the diagnostic workup and management and complications of a patient with Post-Streptococcal Glomerulonephritis
	IgA Nephropathy		6	Cognitive	Explain the diagnostic workup and management and

					complications of a patient with IgA Nephropathy
	Chronic glomerulonephritis	1	7	Cognitive	Explain the diagnostic workup and management and complications of a patient with Chronic glomerulonephritis
Pediatrics	Nephrotic Syndrome	1	8	Cognitive	Discuss the clinical presentation, the diagnostic workup and management for suspected GN and Nephrotic Syndrome in Pediatric patients
			9	Psychomotor	Take a history from a patient with Nephrotic Syndrome.
			10	Psychomotor	Perform physical examination of a patient with suspected GN and Nephrotic Syndrome
			11	Affective	Effectively counsel a child and his/her parents with nephrotic syndrome
Theme-2: Scanty Urine					
Medicine/ Nephrology	Electrolyte disorders	1	12	Cognitive	Explain the etiology, clinical features, diagnosis and treatment of Hyper and Hyponatremia
			13	Cognitive	Explain the etiology, clinical features, diagnosis and

					treatment of hyper and hypokalemia
		1	14	Cognitive	Explain the etiology, clinical features, diagnosis and treatment of hyper and hypophosphatemia
			15	Cognitive	Explain the etiology, clinical features, diagnosis and treatment of hyper and hypomagnesemia
	Blood Ph abnormalities		16	Cognitive	Explain the etiology, clinical features, diagnosis and treatment of Metabolic acidosis and alkalosis and its associated compensations
			17	Cognitive	Explain the etiology, clinical features, diagnosis and treatment of respiratory acidosis and alkalosis and its associated compensation
	Scanty Urine	1	18	Cognitive	Discuss the diagnostic workup and management approach for a patient with oliguria and anuria
	Uremia		19	Cognitive	Discuss the pathophysiological mechanisms, clinical manifestations, investigations and management of a patient with Uremia

	Chronic Kidney Injury	1	20	Cognitive	Explain the diagnostic workup and management and complications of a patient with Chronic Kidney Injury
Pediatrics	Acute Kidney Injury (AKI)	1	21	Cognitive	Discuss the clinical presentation, the diagnostic workup and management for Acute Kidney Injury in Pediatric patients
	Chronic Renal Failure (CKD)	1	22	Cognitive	Discuss the clinical presentation, the diagnostic workup and management for Chronic Renal Failure in Pediatric patients
Theme-3: Loin pain and dysuria					
Medicine/ Nephrology	Approach to blood in urine (haematuria)	0.5	23	Psychomotor	Take a history from a patient presenting with blood in the urine
			24	Psychomotor	Perform a physical examination of a patient with blood in the urine
			25	Cognitive	Discuss the diagnostic workup and management approach for a patient blood in urine.
	Loin pain and dysuria	0.5	26	Cognitive	Discuss the diagnostic workup and management approach for a patient with loin pain and dysuria

	Acute pyelonephritis	1	27		Discuss the diagnostic workup and management approach for a patient with acute pyelonephritis
	Acute and chronic prostatitis	1	28		Discuss the diagnostic workup and management approach for a patient with acute and chronic prostatitis
Surgery	Nephrolithiasis	1	29	Cognitive	Explain the etiology, risk factors, types, approach, investigations, treatment and prevention of Nephrolithiasis
			30	Psychomotor	Take a history from a patient presenting with acute Flank and loin pain.
			31	Psychomotor	Perform a physical examination of a patient with acute Flank, and loin pain
			32	Affective	Counsel a patient presenting with nephrolithiasis
	Dysuria	1	33	Cognitive	Discuss the diagnostic workup for Dysuria
			34	Cognitive	Discuss the management options for a patient with Dysuria
	Hematuria		35	Cognitive	Discuss the diagnostic workup for Hematuria
			36	Cognitive	Discuss the management options for a patient with Hematuria
Theme-4: Pain and swelling of external genitalia					

Surgery	Testicular torsion	1	37	Cognitive	Discuss the diagnostic workup for Testicular torsion
			38	Cognitive	Discuss the management options for a patient with Testicular torsion
	Hydrocele		39	Cognitive	Discuss the diagnostic workup for Hydrocele
			40	Cognitive	Discuss the management options for a patient with Hydrocele
	Testicular tumors	1	41	Cognitive	Explain the diagnostic workup and management and complications of a patient with suspected Testicular tumors
	Epididymo-orchitis		42	Cognitive	Discuss the diagnostic workup for Epididymo-orchitis
			43	Cognitive	Discuss the management options for a patient with Epididymo-orchitis
Pediatric surgery	hypospadias	1	44	Cognitive	Discuss the types, complications, and management of a child with Hypospadias
Urology	Male infertility	1	45	Cognitive	Discuss the diagnostic approach and management options for a male patient with infertility
Medicine/ Nephrology	Sexually transmitted infections	1	46	Cognitive	Classify STDs and enlist their treatment options

			47	Cognitive	Discuss the management approach of a patient with a new onset lesion on the genitalia
--	--	--	----	-----------	---

Hours allocation to different subjects in cognitive domain

S. No	Subject	Hours
	Medicine/Nephrology	11
	Surgery	4
	Pediatrics	3
	Urology	1
	Pediatric surgery	1
	Total	20