Renal disorders - Tutorial - Batch 26

Date	Time(PM)	Group	Venue
02.09.2018	3.15 - 4.15	B	Tutorial room A20-003
	4.15 - 5.15	D	
03.09.2018	1.15- 2.15	C	Tutorial room A20-004
	2.15-3.15	A	

You are expected to bring written answers to all three questions, when you attend the tutorial.

1. 1.1. A normal glomerulus is composed of a tuft of capillaries lined by an endothelial lining, visceral and parietal epithelial cells and mesangial cells.

Draw a simple diagram of a glomerulus and name the structures.

1.2. Glomerulonephritides are a group diseases affecting these glomeruli.

List the basic alterations that can be recognized in the glomeruli on light microscopic examination of a renal biopsy in a patient affected with glomerulonephritides.

1.3. Briefly discuss the value of routine staining (Hematoxylin and eosin stain/H&E), special stains (PAS stain and silver stain), immunofluorescence stain and ultrastructural examination / electron microscopic examination of renal biopsy.

1.4. List the types of primary glomerulonephritides that give rise to nephritic syndrome.

1.5. Give underlying causes for the different histological types of glomerulonephritides that you mentioned under 1.4.

1.6. Briefly discuss the pathogenesis of acute diffuse proliferative glomerulonephritis. (poststreptococcal glomerulonephritis)

2. A 5- year- old boy presented with facial puffiness and ankle swelling. He was suspected of having nephrotic syndrome

2.1. Define nephrotic syndrome.

2.2. What are the investigations that you would request?

Give the expected findings and the pathophysiologic basis for these findings?

2.3. What is the most likely histological diagnosis?

2.4 Explain briefly the glomerular filtration barrier.

2.5 Explain the pathophysiological basis of oedema in nephrotic syndrome

3. A 40- year- old male presented with passing of red colour urine. Radiological investigations revealed a staghorn calculus in the renal pelvis.

3.1. List the other causes for red colour urine.

3.2. How would you confirm this as haematuria?

3.3. What are the other investigations you would perform in this patient?

3.4. What are the useful clinical features that would enable you to identify the cause for the haematuria?

3.5. What are the macroscopic findings you expect to see in the kidney of this patient?