Foundation in Pathology & Clinical Pathology

Total Credits: 5.5

Credits: 4.5 – Foundation in Pathology
(Credits: 1.0 – Foundation in Clinical Pathology)

Foundation in Pathology (End of Year 2 Semester 2)

Duration: 4 Weeks (20 days)

Topic & Concepts	Objectives	Time	Dept.	T/L activity	Comments
	At the end of the module, the student should be able,				
3/SBM-1/01					
Introduction to Pathology	to understand the purpose of the module and the basis for the design of the module	1h	Pathology	Introductory session	
3/SBM-1/02					**A list of pre requiste knowledge for the FCP will be provided to the students.**
Acute inflammation and suppuration	1. to define the process of acute inflammation.	9h	Pathology	Lectures (6h) + Museum Class (3h)	This will be supplemented by clinical lecture demonstration and will be done by the clinicians. * detailed objectives are given separately to the students Application of wound healing in clinical practice by a surgeon (1h) ** Pathology slide class - Review of Microscopic slides of general pathological processes
	2.to describe in detail* the various steps, controlling factors, sequale, complications and clinicopathological effects of acute inflammation. (includes suppuration)				
3/SBM-1/03					
Chronic inflammation	1.to define the process of chronic inflammation				
	2. to describe in detail* the non-specific and specific types of chronic inflammation, its sequele and complications				
3/SBM-1/04					
Wound healing	1. to describe the process of healing in injured tissue and its complications	5h	Pathology	Lectures (4h) + Museum Class (1h)	
	2. to describe in detail* the process of healing in different types of tissue and surgical wounds.				
	3. to describe in detail* the formation of the organ of repair- namely granulation tissue.				

3/SBM-1/05					This will be supplemented by clinical demonstrations in the wards during the introductory clinical appointments, and will be done by the clinicians. The clinicians will be informed of the topics during each week. * detailed objectives are given separately to the students
Necrosis and apoptosis		4h	Pathology	Lectures (3h) + Museum class - (1h)	
	1. to describe in detail* the morphological changes that occur in irreversibly injured cells and the clinico-pathological effects of such necrosis				
	2. to outline the non reversible types of cell injury.				
	3. to describe in detail* the pathogenesis and pathology of different types of necrosis				
	4. to outline the clinicopathological effects and recognition of necrosis				
	5. to define the term reperfusion injury and describe the process				
	6. to define the term apoptosis and discuss the clinicopathological significance				
	7. to name the steps in apoptosis and the controling factors				
	8. to differentiate apoptosis from necrosis				
3/SBM-1/06					
Tuberculosis	1. to describe the pathogenesis of tuberculosis	2h	Pathology	Lectures (2h)	
	2. to understand the concepts of primary and postprimary tuberculosis				
	3. to describe the complications of the tuberculosis				
	4. to explain pathological basis of the clinical effects				
3/SBM-1/07					
Disorders of Growth and differentiation	1. to outline the ways in which different cell types react to increased work demand and chronic irritation.	5h	Pathology	Lectures (3h) + Museum Class - (2h)	
	2. to describe in detail* the process of hypertrophy, hyperplasia, atrophy and metaplasia, and the pathology of these processes.				
	3. to give examples and also to state the clinico pathological effects of the processes mentioned above.				
3/SBM-1/08					
Thrombosis	1. to list the main factors which predispose to thrombosis.	3h	Pathology	Lectures (2h) + Museum class (1h)	
	2. to describe in detail* the pathogenesis and sequelae of thrombosis in different types of blood vessels and the heart, and the fate of thrombi				
	3. to mention the clinicopathological features of thrombosis in the different types of blood vessels.				
3/SBM-1/09					
Embolism	1. to define the process of embolism.	4h	Pathology	Lectures (2h)	Clinical lecture demonstration by a

	2. to describe in detail* formation of different types of emboli and describe the outcome of the different types of embolism including the clinicopathological effects.			+ Practical (2h)	surgeon (1h)
3/SBM-1/10					
Congestion, oedema and infarction	1. to describe the effects in tissue, when the vascular blood supply alters, and the venous return is hampered.	5h	Pathology	Lectures (4h) + Museum class (1h)	including lymphoedema
	2. to define the processes hyperaemia(active and passive), oedema and infarction				This will be supplemented by clinical demonstrations in the wards during the introductory clinical appointments, and will be done by the clinicians. The clinicians will be informed of the topics during each week. * detailed objectives are given separately to the students
	3. to describe in detail* the pathogenesis of these processes.				
	4. to list the processes that injure lymphatics and the clinicopathological outcome due to injured lymphatics.				
3/SBM-1/11					
Amyloidosis	1. to define the process of amyloidosis.	2h	Pathology	Lectures & Case discussions (2h)	
	2. to describe in detail* the pathogenesis, types and clinical effects and methods of diagnosis of of amyloidosis.				
3/SBM-1/12					
Other accumulations	1. to describe the process of pathological calcification and to state clinical examples.	2h	Pathology	Lectures (2h)	
	2. to enumerate the types of abnormal pigments in the living persons and their pathogenesis and clinical importance.				
3/CLM-1/01					
Abnormal constituents in urine	to perform inward tests for urinary protein, sugar, bile and ketone bodies	4h	Biochemistry	Practical (4h)	
3/SBM-1/13					
Atherosclerosis	1. to describe the risk factors of atherosclerosis	2h	Pathology	Lectures (2h)	
	2 to describe the pathogenesis and pathological processes involved in atherosclerosis				
	3. to describe the complications and clinicopathological effects of atherosclerosis.				
3/SBM-1/14					
Neoplasia and Carcinogenesis					
a. Introduction to neoplasia and oncogenesis	1. to describe the fact that DNA alteration in a cell can lead to tumours and dysplasia.	4h	Pathology	Lectures (3h) + Museum class (1h)	This will be supplemented by clinical demonstrations and will be done by the clinicians (1h) done in foundation for clinical pathology
	2. to describe in detail* the process of carcinogenesis and concepts of dysplastic and premalignant lesions.				
	3. to describe in detail* the different types of tumours and their pathogenesis and morphology and differences in behaviour.				

b. Spread of tumours	4. to describe in detail* the modes of spread of malignant tumours and the clinicopathological effects.	3h	Pathology	Lectures (2h) + Museum class (1h)	
3/SBM-1/15					
Applied general pathology	1. to define and explain the pathogenesis of erosions, ulcers, strictures and stenosis, blisters and bullae, fistula, sinus, polyps, adhesions, scars, fungating mass, organomegally, macule, papule, purpura, ecchymosis, naevi & warts and papillomata & application of these in systems	10h	Pathology	Lecture demonstration	clinical applications with clinicians
3/SBM-1/16		3h	Pathology	Lectures (3h)	
Introduction to Haematology	1. recall the cellular components in blood and haemopoiesis				
	2. outline the common types of non malignant and malignant diseases of blood				
3/SBM-1/17					
Introduction to Clinical Pathology	1. outline the applications of serological and haematological investigations in patient management	1h	Pathology	Lecture (1h)	