GASTROINTESTINAL & NUTRITION BLOCK INTRODUCTION

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OBJECTIVES

- By the end of the gastrointestinal and haematology block, students should be able to:
- Correlate between the anatomical structures and their functions.
- Use the basic sciences to interpret symptoms, signs and investigation results
- Understand the pathology, microbiology and pathogenesis of the common disorders
- Discuss the pharmacological basis of drugs
- Epidemiology and preventive approaches

OBJECTIVES

- Revisit epidemiological parameters such as
  - body mass index
  - Macro and micro nutritional requirements of a population.
- Normal haemopoiesis and the functions of different haemopoietic cells.
- Disorders affecting the haemopoietic system, with particular emphasis on anaemia.
- Role of haemoglobin and its types of and iron metabolism.
- Develop communication and professional skills at the level of a medical student.

TEACHING & LEARNUNG MODES

- Small group discussion
- Lectures
- Student-led seminars
- Practical classes
- Clinical skills
- Self-directed learning
- Writing an essay or mini thesis
- E-learning sessions

LECTURES & EXAMINATIONS

- Esophagus and Stomach.
- Pancreas.
- Small Intestine.
- Colon.
- Liver & hematopoietic system.
- Spleen & hematopoietic system.
- Gallbladder & Biliary System.

- Total
- 88 lectures
- 7 practicals

- Seven Weeks
- Week 5: Midblock Examination 25 December 2016
- Week 8: Consolidation week from 15 January 2017 to 19 January 2017
- Week 9: Examination week from 22 January 2017 to 26 January 2017

OESOPHAGUS AND STOMACH

Specialty	Lecture (16) Week (1)	Practical
Anatomy	1-Anatomy of the oral cavity oseophagus and stomach 2-Histology of the esophagus and stomach 3-Anatomy and histology of the salivary glands 4-Introduction to Pleuripotent stem cell	Anatomy, histology and radiology of eosophagus & stomach
Physiology	1-General principles of GIT physiology 2-Oesophageal motility and pathophysiology of reflux disease 3-Physiology of the stomach and regulation of gastric secretions	
Biochemistry	1-Role of salivary gland and stomach in digestion 2-Structure and function of haemoglobin	
Pathology	1-Gastro Esophageal Reflux Disease (GERD) 2-Pathology and pathophysiology of peptic ulcer	
Microbiology	1-*H pylori* and drugs used in treatment	
Hematology	1-Anemia 2-Hemoglobinopathies 3-Transfusion & Cross-matching	
Pharmacology	1-H2 blockers and proton pump inhibitors 2-Antiemetic drugs	

PANCREAS

Specialty	Lecture (9) Week (2)		Practical
Anatomy	1-Embryology of the pancreas and small intestine	2-Anatomy and histology of pancreas and biliary system	
Physiology	1-Physiology of pancreas		
Biochemistry	1-Biochemical aspects of digestion of lipids 2-Biochemical aspects of digestion of proteins and carbohydrates	3-Nutritional requirements 4-Plasma proteins 5-Macro and micro nutrients	
Pathology	1-Pathology and pathogenesis of acute and chronic pancreatitis		GERD & Peptic ulcer

SMALL INTESTINE

Specialty	Lecture (11) Week (3)	Practical
Anatomy	**1-Anatomy and histology of the small intestine**	
Physiology	1-Physiology of the small intestine: motility and secretion	
Biochemistry		Clinical chemistry and pathology practical about malabsorption, acute and chronic pancreatitis
Pathology	1-Pathology and mechanisms of malabsorption **2-Pathophysiology and mechanisms of diarrhea**	
Microbiology	1-Normal flora and introduction to infectious diarrhea 2-Intestinal helminthes 3-Intestinal protozoa 4-Viral gastroenteritis 5-Shigella and salmonella 6-Cholera	
Radiology	**1-Radiology of the abdomen**	

COLON

Specialty	Lecture (12) Week (4)	Practical
Anatomy	1-Anatomy and histology of the large intestine 2-Anatomy of the omentum	Anatomy, histology and radiology of the small and large intestine
Physiology	1-Physiology of the colon: motility	
Pathology	1-Colonic tumours and polyps-1 2-Colonic tumors and polyps-2 3-Crohn's disease 4-ulcerative colitis	
Microbiology	1-Schistosomiasis	
Pharmacology	1-Treatment of dysentery and amoebiasis 2-Drugs used in treating constipation and IBS 3-Drugs used in IBD and biological and immune therapy of IB	
Medicine	1-Irritable bowel syndrome	

LIVER & HEMATOPOIETIC SYSTEM

Specialty	Lecture (18) Week (5)	Practical
Anatomy	1-Anatomy of the liver and spleen	
Physiology	1-Bilirubin metabolism 2-Reticuloendothelial system and function of the spleen 3-Coagulation mechanisms 4-Platelets structure and functions	
Biochemistry	**1-Liver function test** **2-Biochemical aspects of bile acids and salts** **3-Urea cycle** **4-Biochemistry of vitamin K**	
Pathology	1-Pathology and pathogenesis of liver Cirrhosis 2-Complication of liver cirrhosis 3-Cancer of the liver and pancreas	
Microbiology	**1-Trypanosomiasis** **2-Leishmaniosis** **3-Viral hepatitis B, C, D and G**	
Hematology	1-Approach to bleeding disorders	
Pharmacology	1-Cytochrome system and drug metabolism 2-Hepatotoxic drugs	

SPLEEN & HEMATOPOIETIC SYSTEM

Specialty	Lecture (14) Week (6)		Practical
Anatomy	1-Histology of the liver and spleen		
Biochemistry	**1-G6PD**		
Pathology			Liver function test(Integrated Biochemistry & Pathology)
Microbiology	**1-Malaria** **2-Viral hepatitis A and E**		
Hematology	1-Acute leukemia I 2-Acute leukemia II 3-Megaloblastic anemia 4-Chronic Leukemia	5-Polycythemia 6-Lymphoproliferative disorder 7-Approach to Hemolysis	Hemoglobinopathies
Pharmacology	1-Anti-coagulant drugs 2-Anti-Malarial Drugs	3-Anti-Platelet Drugs	

GALLBLADDER & BILIARY SYSTEM

Specialty	Lecture (8) Week (7)	Practical
Physiology	1-Physiology of bile salts and enterohepatic Circulation	
Biochemistry		
Pathology	1-Pathology and pathogenesis of gallstones and cholecystitis 2-Liver, biliary system and pancreas	
Microbiology	1-Hepatitis 2-Blood Parasites	
Hematology	1-Bleeding disorders	
Radiology	1-Ultrasound of the liver and gallstones	Anatomy, histology and radiology of liver, spleen, pancreas and biliary system
Medicine	1-Pathophysiology of ascites	

EVALUATION

SI. No	Item	Marks
1	Small Group	5
2	Midterm MCQs	20
3	Short Answer Question (SAQs)	20
4	Final MCQs	30
5	OSPE	20
6	Clinical Skills	5
TOTAL		100

THANK YOU

WISH YOU THE BEST OF LUCK