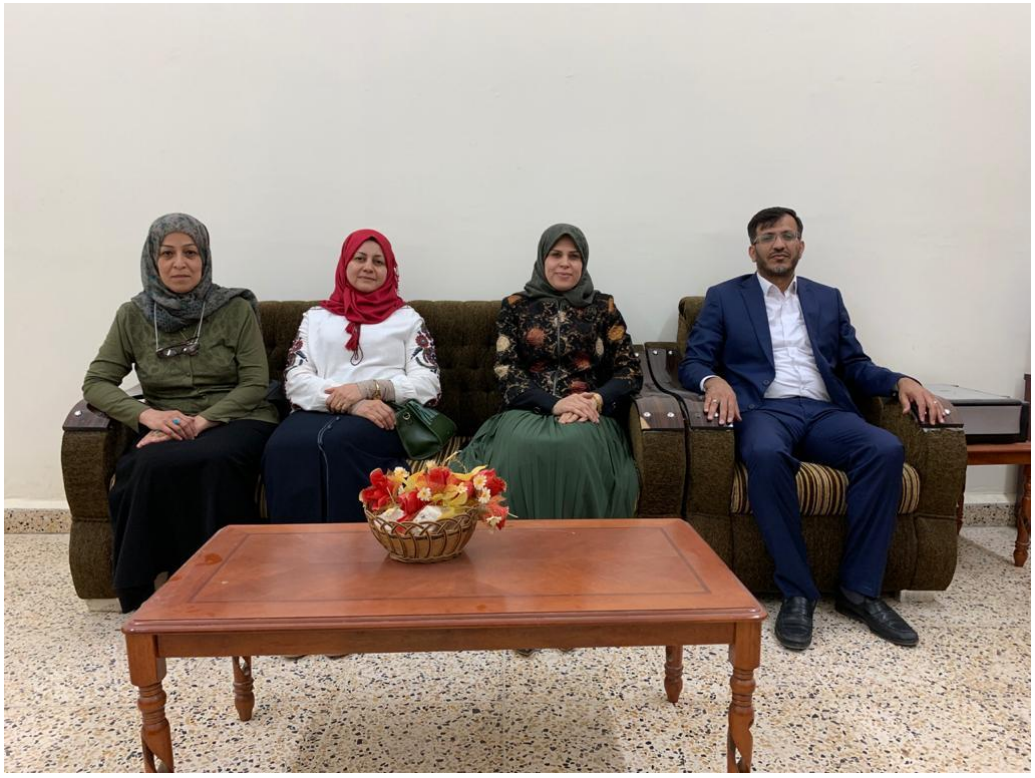
Pathology And Forensic Medicine



Objectives of the Department:

At the end of the third year, students should be able to:

1. Understand the pathological changes.
2. Understand and relate the diseases to pathology.
3. Able to search literatures about specific disease pathology.
4. Relate physiology to pathology.
5. Be familiar with atlas.
6. Attend the hospital laboratory.
7. See the pathological slides and gross specimens.
8. To inspire the student for interest in specialization in pathology in the future.

Teaching Aims for forensic medicine for fourth year students.

1. Explanation and interpretation of medicolegal problems.
2. Provide the student with necessary information concerning the principles of forensic medicine.
3. To acquire skill and ability to make medicolegal decision.

Teaching Staff of The Histopathology Department:

	Names	Specialty	Degree	Scientific degree	Position
1	Rasha Qusai Abul	M.B.Ch.B	F.I.C.M.S	assist. Prof.	Head of

	Gani		histopathology		department
2	Maha Shakir Hassan	M.B.Ch.B	F.I.C.M.S histopathology	professor	Teaching
3	Lamia Jarallah Yaseen	M.B.Ch.B	F.I.C.M.S histopathology	assist. Prof.	Teaching
4	Hameed Naeem Mousa	M.B.Ch.B	F.I.C.M.S histopathology	assist. Prof.	Teaching

Third Year Curriculum:

No	subject	hours
1	introduction	1
2	Cellular injury and adaptation ❖ Definition & classification of injurious agents ❖ Mechanism of cell injury: - • Reversible injury • Irreversible injury: - necrosis & apoptosis ❖ Intracellular accumulation ❖ Cellular adaptation ❖ Degenerative changes	4
3	Inflammation ❖ Acute inflammation • Vascular changes • Cellular changes • Chemical mediators • Morphological pattern of acute inflammation • Fate of acute inflammation ❖ Chronic inflammation • Causes • Morphological features ❖ Granulomatous inflammation	4
4	Healing & repaired ❖ Definition ❖ Cell cycle ❖ CT. response (including extracellular matrix component) ❖ Regeneration ❖ Healing of skin wounds ❖ Healing of bone fractures ❖ Factors affecting healing & complications	3
5	Hemodynamic ❖ Congestion ❖ Edema ❖ Thrombosis ❖ Embolism	6

	❖ Infarction ❖ Shock	
6	Infectious diseases ❖ host organism interaction ❖ defenses mechanism ❖ categories of infectious agents ❖ route of entry of microorganisms ❖ how infectious agents causes disease ❖ selected human infectious disease • Tb. & respiratory tract infections • Leprosy • Bilharziasis • Hydatid disease • Aspergillosis • Pyogenic bacterial infection: staphylococcal &streptococcal spp. • Gastrointestinal tract infections • Sexual transmitted diseases	10
7	Neoplasia ❖ Normal cell growth ❖ Molecular base of cancer ❖ Cancer etiology ❖ Features of transformed cells ❖ Nomenclatures ❖ Non-neoplastic mass ❖ Morphological differences of benign from malignant ❖ Grading &staging of tumors ❖ Cancer epidemiology ❖ Host immunity against tumors ❖ Immune surveillance ❖ Clinical feature of tumors ❖ Lab diagnosis of cancer	12
8	Genetic disease ❖ Mutation ❖ Mendelian disorders (diseases caused by single gene defects) ❖ Disorders with multifactorial inheritance ❖ Single gene disorders with a typical pattern of inheritance ❖ Pediatric diseases ❖ Congenital malformation	6
9	Disorders of immune system ❖ Introduction (cells, cytokines, histocompatibility) ❖ Immune mechanism of tissue injury ❖ Autoimmune diseases	5

	• Self-tolerance • Mechanism of autoimmune diseases • Selective examples of autoimmune diseases ❖ Immune deficiency disease ❖ Amyloidosis	
10	Environmental diseases ❖ Air pollution diseases ❖ Injury by chemical agents ❖ Injury by physical agents ❖ Nutritional diseases • Metabolic effect of starvation • Nutritional deficiencies • Protein energy malnutrition syndrome • Vitamins deficiency • Mineral deficiency	4
11	Cardiovascular system ❖ The heart • Congestive heart failure • Ischemic heart disease • Hypertensive heart disease • Valvular heart disease • Congenital heart diseases ❖ The arterial disease • Arteriosclerosis • Vasculitis • aneurysm ❖ Venous disease • Varicose veins • Phlebothrombosis & thrombophlebitis ❖ Lymphatic disorders ❖ Vascular tumors	8
12	Respiratory system ❖ Obstructive & restrictive lung disease ❖ Vascular lung diseases ❖ Pulmonary infection ❖ Lung tumors ❖ Pleural effusion ❖ Lesion of upper respiratory tract	8
13	Urinary system ❖ Glomerular diseases ❖ Diseases affecting tubules and interstitium ❖ Cystic disease of the kidney	8

	❖ Urinary out flow obstruction ❖ Tumors	
14	Reproductive system ❖ Male reproductive system • Diseases of penis • Diseases of secrotum, testis, epidydimis • Diseases of prostate	4
15	Female reproductive system ❖ Valvitis ❖ Non- neoplastic epithelial tumors ❖ Vuvalr tumors ❖ Vagina (vaginitis, vaginal intraepithelial neoplasia & ca ❖ Cervix (inflammation, tumor) ❖ Body of uterus ❖ Fallopian tube diseases ❖ Ovaries ❖ Diseases of pregnancy	4
16	Diseases of the breast ❖ Inflammation ❖ Fibrocystic disease (including non-proliferative & proliferative) ❖ Tumors ❖ Male breast	3
17	Gastrointestinal diseases ❖ Oral cavity • Ulcerative and inflammatory lesion • Leukoplakia • Tumor of the oral cavity and tongue • Salivary gland diseases (inflammation and tumors) ❖ Esophagus • Esophagitis including Barrettes- esophagus • Anatomic and motors disorders (hiatus hernia, achalsia, varices, Mallory- Weiss syndrome) • carcinoma ❖ Stomach • Gastritis • Gastric ulcer • tumors ❖ Small and large intestine • Developmental anomalies • Vascular disorders • Diarrheal diseases • Idiopathic inflammatory bowel diseases	10

	• Colonic diverticulosis • Tumors of small and large intestine ❖ Appendix • Appendicitis • Tumors ❖ Liver • Jaundice • Hepatic failure • Hepatic cirrhosis • Inflammatory disorders • Drug and toxin induce liver disease • In born errors of metabolism • Circulatory disorders • Intrahepatic biliary tract disease ❖ Gallbladder and biliary tract • Disorders of gall bladder • Disorder of extrahepatic bile tract • tumors ❖ pancreas • pancreatitis • diabetes mellitus • islet cell tumors	
18	Endocrinal system ❖ pituitary gland • hypopituitarism • hyperpituitarism • posterior pituitary syndrome ❖ thyroid gland • clinical condition (hyper and hypothyroidism) • thyroiditis • goiter • neoplasm of thyroid gland ❖ parathyroid gland • hypoparathyroidism • hyperparathyroidism ❖ adrenal gland • adrenocortical hyperfunction • adrenocortical insufficiency • neoplasm • adrenomedullary diseases ❖ multiple endocrine neoplasia syndrome	6

19	Diseases of blood and bone marrow ❖ red cells disorders • hemorrhage • hemolytic anemia • anemia and diminished erythropoiesis • polycythemia ❖ white cells disorders • non- neoplastic disorders of WBC • neoplastic proliferation of WBC (lymphoma, leukemia, myeloproliferative disease) ❖ bleeding disorders • thrombocytopenia • coagulative disorders ❖ diseases of spleen and thymus	6
20	Diseases of locomotors system ❖ diseases of bone • congenital and hereditary diseases of bone • osteoporosis and acquired metabolic diseases • osteomyelitis • pagets diseases • bone tumors ❖ diseases of joints • osteoarthritis • gout • infectious arthritis ❖ diseases of skeletal muscle • muscle atrophy • myasthenia graves • inflammatory myopathies • muscular dystrophy ❖ soft tissue tumors • tumors of adipose tissue • tumors and tumor like lesion of fibrous tissue • neoplasm of skeletal muscle • smooth muscle tumors	4
21	The nervous system ❖ introduction (cells of the nervous system) ❖ edema, herniation and hydrocephalous ❖ vascular diseases ❖ CNS trauma ❖ Infection of the NS	4

	❖ Neoplasm of the CNS ❖ Primary diseases of myelin ❖ Degenerative diseases ❖ Diseases of peripheral nervous system	

Programmed lectures of forensic medicine:
Fourth year curriculum:

Subject	No. of lectures
Introduction	1
Medicolegal cases and report	1
Diagnosis of early death and postmortem changes	9
Types of wounds	10
Regional injuries of medicolegal importance	7
Firearm wounds and explosions	4
Death from Burn, heat stroke, hypothermia and electrocution	4
Transportation injuries (road traffic accidents)	2
Asphyxia death	6
Sexual insults	2
Total	**60**

Methods of assessment:

Third year (pathology)

A comprehensive examination (written, practical and oral) concerning the contents of the course will be held at the end of the year (a total of 65 marks). This is preceded by a mid-year examination (written and practical = 25 marks). And a multiple quiz (5 marks for each term). Any student who fails will be held back for three months. Fourth year (forensic medicine) A comprehensive examination (written and oral concerning the content of the course will be held at the end of the year (a total of 60 marks). This is preceded by a mid- year examination (written=20 marks) and two short written mid-term examination (10 marks for each). Any student who fails will be held back for three months.

The published scientific researches

no	name of researcher	title of published article	Journal	Vol.	no.	date	pages
1	Hameed Naeem Mousa	Expresion of B-HCG and its pathological aspect in colorectal carcinoma					
2	Hameed Naeem Mousa	Epidemiological study of cancer in Thi-Qar governorate					

no	name of researcher	title of published article	Journal	Vol.	no.	date	pages
3	Hameed Naeem Mousa ,et al	The study of histopathological changes for the eyes of Ruttus norvegicus L. poured by hadatid cyst fluid	The Proceedings of the 4th Conference of College of Education for Pure Sciences	4	1		328-334
4	Hameed Naeem Mousa ,et al	Relationship between TGF-α and its Receptor EGFR Expression with Clinicopathological Variables in Thyroid Carcinoma	International Journal of Scientific Engineering and Research	3	791	2015	80-84
5	Lamia Jarallah Yaseen	Pattern of ulcerative colitis in Nasiriyah "Evaluation of 157 cases"	Thi-Qar Medical Journal (TQMJ	9	1	2015	43-48
6	Lamia Jarallah Yaseen	A Glimpse on the Colonic Polyps' Problem in Thi-Qar	Thi-Qar Medical Journal (TQMJ):	16	2	2018	149-154
7	Lamia Jarallah Yaseen	Pattern of ulcerative colitis in Nasiriyah "Evaluation of 157 cases"	Thi-Qar Medical Journal (TQMJ):	9	1	2015	
8	Lamia Jarallah Yaseen ,et al	Hepatic Hydatidosis in man and livestock in Nassiriyah, Iraq	International Journal of PharmTech Research	7	2	2015	310-314
9	Lamia Jarallah Yaseen ,et al	THE PATTERN OF OSTEOSARCOMA IN SOUTHERN PART OF IRAQ	Basrah Journal Of Surgery	13		2007	35-43
10	Maha Shakir Hassan	An evaluation of methods of sputum production in patients with suspected lung cancer	Journal of the faculty of medicine/Baghdad			2006	
11	Maha Shakir Hassan	Hematological parameters in acute promyelocytic leukemia patients treated with ALL-Transretinoic acid	Journal of the faculty of medicine/Baghdad			2006	
12	Maha Shakir Hassan	A Study of angiogenesis in human endometrial denocarcinoma, and premalignant endometrial lesions: A comparative clinic pathological study.	Thi-Qar Medical Journal (TQMJ):	4	1	2010	17-Jan
13	Maha Shakir Hassan	Coordinate Expression of Cytokeratins 7 and 20 and Other Immunohistochemical Markers in Prostate Adenocarcinoma and Bladder Urothelial Carcinoma	International Journal of Scientific & Engineering Research	5	3	2014	617-624
14	Maha Shakir Hassan	The role of ultrasonography in the diagnosis of acute appendicitis.	Journal of the Medical college - Thiqar University			2009	
15	Maha Shakir Hassan ,et al	Immunohistochemical Aspects on (HSP70) and its Correlation to Clinical Stages, Pathological Grading and Hormones Receptors (ER, PR, HER-2) in Breast Cancer (BC) Women from South of Iraq	international journal of sceinces	6	3	2017	39-48
16	Maha Shakir Hassan ,et al	Immunohistochemical aspects on (IL-6) and its relationship to pathological parameters and hormones receptors	International Journal of Medical Science and Clinical Inventions	4	3	2017	2740-2749

no	name of researcher	title of published article	Journal	Vol.	no.	date	pages
		(ER, PR, HER-2) in breast cancer (BC)women from south ofIraq					
17	Maha Shakir Hassan ,et al	Clinical Study of Phospholipase D1 and Choline Kinase Alpha Enzymes in Women with Breast Cancer in Thi-Qar Governorate-Iraq	Journal of Global Pharma Technology	11	9	2019	665-674