DEPARTMENT OF MORBID ANATOMY

AND FORENSIC MEDICINE

FACULTY OF BASIC CLINICAL SCIENCES

COLLEGE OF HEALTH SCIENCES

OBAFEMI AWOLOWO UNIVERSITY, ILE-IFE

NIGERIA

DEPARTMENTAL OF MORBID ANATOMY AND FORENSIC MEDICINE
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INTRODUCTION

Anatomical Pathology is the bedrock of medical practice. Only a solid foundation of anatomical pathology can guarantee understanding of the mechanisms of diseases and help in providing appropriate care for patients. To be able to train medical students to be good physicians, we need to impact knowledge in the best way possible with reference points/benchmarks so that the doctors will also measure up to internationally acceptable standards.

HISTORICAL BACKGROUND

The department evolved from the present College of Health Sciences, Obafemi Awolowo University Ile-Ife, Osun State, Nigeria inaugurated as Faculty of Health Sciences in May, 1972. By the early 80's, the Department of Morbid Anatomy and Forensic Medicine was created and headed by Prof. W.O. Odesanmi; the first Head of the Department. He set a good foundation for the training of many generations of resident doctors.

Our philosophy cum goals and objectives:

1. Since a sound understanding of Anatomical Pathology is crucial to good medical practice, we aim to present, teach, and structure the curriculum of morbid anatomy so that medical students can have a good understanding of the basic mechanisms of diseases with a view to providing appropriate care for patients.
2. To impart requisite knowledge in the best way possible with reference points/benchmarks.
3. Emphasize universal and local ailments so that our products can be relevant locally and measure up to internationally acceptable standards.

To achieve these philosophies of excellence, we recognize four (4) definite entities that we need to emphasize in the training of medical students:

1. Anatomic Pathology (Morbid Anatomy)
    a General Pathology
    b. Systemic Pathology
    c. Tropical Pathology

2. Forensic Medicine

Each of the divisions of pathology has further been broken down to various courses as follows:

MAF 302 General Pathology I 3 Units

Introduction to Pathology and the pathological basis of diseases

Objectives:

1. Introduce the subject of pathology as fundamental to the principles of understanding the concept of diseases, disease evolution/pathogenesis and progression.
2. Emphasize role of basic mechanisms as foundational to the understanding of the symptomatology
of diseases.
3. Understand the aetiological basis of diseases and concept of pathogenesis, lesions (morphology) and clinical (functional) significance.

Course Outline:

a Introduction to Pathology, Autopsy Pathology: types of autopsies, techniques of dissection and interpretation.
b. Normal cell structure, type, and extracellular matrix. Mechanisms of cellular growth and differentiation.
c. Cellular injury types, causes and mechanisms Cell death: Necrosis and Apoptosis.
d. Cellular adaptation of growth and differentiation.
e. Pathological calcification and intracellular accumulation.
f. Acute inflammation: definition, benefits, vascular and cellular response. Chemical mediators of inflammation.

g. Chronic inflammation: Chronic non-specific and chronic granulomatous.

h. Types of wounds, Mechanisms of tissue healing and repair.

Genetics, Molecular Pathology and Nutritional disorders

Objectives:

a. To teach the basis of inheritance

b. Illustrate the role of genetics and its interaction with environment in the pathogenesis of diseases

c. To teach ways of detecting genetic disorders

d. Highlight common nutritional disorders

Course Outline

a. Chromosome, DNA structure, genes, and mutation.

b. Mendelian disorders, Cytogenetic disorders, Single gene disorders with non-classic inheritance. Molecular diagnosis of genetic disorders

c. Protein Energy malnutrition, Pathology of Obesity, Vitamin disorders (hypo and Hypervitaminosis).

d. Environmental diseases I: chemical and drugs - Alcohol and street drugs,

e Environmental diseases II: Air Pollution and Tobacco,

f. Pathology of Radiation injury

MAF 304 General Pathology II 3 Units

The Pathology of Immune disorders

Objectives

1. To convey to the students the organization of the immune system.
2. To make students understand the immunological basis of diseases
3. To discuss specific immunological disorders and highlight the role of specific immunological principles.

Course Outline

a Introduction to immunology: the normal immune system and principles of immunopathology

b. Human Leucocyte Antigens and the Major Histocompatibility Complex, Cytokines,

c. Hypersensitivity disorders,

d. Autoimmune diseases,

e. Amyloidosis,

f. Transplantation disorders

Neoplasia

Objectives

1. Highlight the principles of oncogenesis

2. Define what neoplasm are as against "tumours, swellings, hyperplastic and hypertrophic lesions"

3. Learn the modern techniques in cancer diagnosis

Outline

a Definition of neoplasms,

b. Nomenclature and characteristics of Neoplasms,

c. Aetiology and epidemiology of Neoplasms,

d. Biology of tumour growth and metastasis.

e Host response to Neoplasia and clinical features,

f Laboratory diagnosis of Neoplasia, & Microbial carcinogenesis, chemical carcinogenesis, Radiation carcinogenesis,

h. Paraneoplastic syndromes,

i. Role of immunohistochemistry and tumour markers in tumour diagnosis

Haemodynamic Disorders

Objectives

1. Establish the anatomic and physiological basis for haemodynamic disturbances

2. Highlight the various pathophysiological challenges that may alter known outcomes

3 Highlight the morphologic patterns associated with haemodynamic disorders

Outline

a. Oedema and types of oedemas

b. Hyperaemia and congestion

c. Haemostasis, thrombosis, and embolism.
d. Haemorrhage, Ischaemia, and Infarction,
e. Pathology of shock.
f. Pathology of disseminated intravascular coagulopathy

Pathology of the Lymphoreticular System

Objectives

1. Review the anatomy of the lymph nodes and the anatomical basis for pathological processes
2. The role of the lymph node in the immune response and immunopathology
3 Highlight the benign lesions and malignant processes, their morphological features and differential
diagnosis
4 Highlight the disease modifiers and complications

Course content

2 Acute lymphadenitis
b. Reactive lymphadenitis
c. Malignant lymphomas
d. Metastatic disorders

MAF 401: Systemic Pathology 4 Units

Cardiovascular Pathology

Objectives

1. Define each cardiovascular disorder in the context of anatomical pathology
2 Establish the anatomical basis and the pathophysiology outcomes
3. Highlight the morphological features and differential diagnosis
4. Highlight the disease modifiers and complications

Outline

a. Atherosclerosis,

b. Systemic hypertension and hypertensive heart disease,

c. Vasculitis, Pathology of Veins, and lymphatics,

d. Tumours and tumour-like conditions of vessels.

e. Pathophysiology of Heart Failure,

f Congenital Heart Diseases,

g Ischaemic Heart Diseases,

h. Infective endocarditis and Rheumatic Heart Diseases.

i: The Cardiomyopathies.

J. Pericardial Diseases, Tumours of the Heart and Pericardium

Respiratory Pathology

Objectives

1. Define each pulmonary pathological processes in the context of anatomical pathology.
2. Establish the anatomical basis and the pathophysiology outcomes
3. Highlight the morphological features and differential diagnosis
4. Highlight the disease modifiers and complications

Course Outline

a. Congenital and Developmental anomalies
b. Pulmonary Oedema, Pulmonary Embolism, Haemorrhage, and Infarction.
c. Diseases of Pleura including inflammatory lesions, mesotheliomas, metastatic lesions etc
d. Pulmonary Infections- Pulmonary tuberculosis, Lobar pneumonias, Bronchopneumonia, collapse
e. Chronic Obstructive Pulmonary Disease, Lung Injuries and Respiratory Distress Syndromes.
f. Tumours of the Lungs and Pleura.

Gastrointestinal and Hepatobiliary Pathology

Objectives

1. Define each Gastrointestinal and Hepatobiliary pathological processes in the context of anatomical pathology
2. Establish the anatomical basis and the pathophysiology outcomes
3- Highlight the morphological features and differential diagnosis
4 Highlight the disease modifiers and complications

Course Outline

a. Diseases of Oesophagus
b. Congenital anomalies,
c. Gastritis, Peptic Ulcer disorders,
d. Tumour of the stomach,
e. Diseases of Intestines - Congenital anomalies.
f. Tropical intestinal infections, Enterocolitis,
g. Malabsorption, Inflammatory Bowel Disease Vascular disease, and Diverticulitis,
h. Disease of appendix,
i. Tumours of small and large intestine.
j. Viral Hepatitis,
k. Metabolic Disease of liver and Toxic liver Injury.
l. Cirrhosis of the liver and Hepatic Tumours.

Pathology of the musculoskeletal system including soft tissue and bone; skin and endocrine system

Objectives

1. Review the relevant anatomy of the musculoskeletal system, skin, and endocrine system
2. Highlight the benign lesions and malignant processes, their morphological features and differential diagnosis
3. Highlight the disease modifiers and complications

Course content

1. Muscular dystrophies
2. Pyomyositis
3. Myositis ossificans

4. Rickets
5. Osteomalacia
6. Benign and malignant soft tissue neoplasms
7. Benign and malignant bone neoplasms
8. Inflammatory disorders of the skin
9. Benign lesions of the skin
10. Malignant disorders of the skin
11. Diabetes mellitus, Conn's disease, Simmonds' disease Sheehan's syndrome, syndrome of inappropriate ADH secretion etc

MAF 402 Systemic Pathology II 2 Units

Pathology of Renal and Male Genital system disorders

Objectives

1. Define each Renal and Male Genital system disorders processes in the context of anatomical pathology.
2. Establish the anatomical basis and the pathophysiology outcomes.
3. Highlight the morphological features and differential diagnosis
4. Highlight the disease modifiers and complications

Course Outline

a. Congenital anomalies
b. Cystic disorders of the kidney,
c. Glomerular diseases,
d. Renal Manifestations of Systemic diseases-SLE Diabetes,
e. Amyloidosis and others,
f. Diseases of vessels - Diseases of tubules and interstitium - Acute tubular necrosis, pyelonephritis,
g. Urinary Tract Infection,
h. Drugs and Toxic injury.
i. Benign and malignant hypertension, renal Artery sclerosis,

j. Sickle Cell Nephropathy. Thrombotic Microangiopathies and others,
k. Obstructive Uropathy and Renal Stones,
l. Benign and Malignant Tumours of the Kidney.
m. Diseases Of Ureters - Congenital Anomalies, Inflammations, Obstructive Disorders and Tumours, Disorders of the Urinary Bladder - Congenital anomalies, Acute and Chronic Cystitis, Obstructive lesions and Tumours, Diseases of Urethra Inflammations, obstructions, and tumours, BPH, Ca prostate.

Pathology of Breast and Female Genital system disorders

Objectives

1. Define each breast and female genital system disorders processes in the context of anatomical pathology
2. Establish the anatomical basis and the pathophysiology outcomes
3. Highlight the morphological features and differential diagnosis
4. Highlight the disease modifiers and complications

Course Outline

a. The Breast, anatomy, embryology.
b. inflammation, benign non-neoplastic lesions of the breast,
c. Tumours of the breast
d. Embryology and Anatomy of the female genital tract.
e. The Vulva-cysts, lichen sclerosis et chronicus
f. Benign and malignant tumours
g. The Vagina - Inflammation and Tumours of the Vagina,
h. Cervix-Inflammation, CIN and Neoplasia,
i. The Uterus and Endometrium - The Menstrual cycle and Functional Disorders, Inflammations,
j. Endometrial hyperplasia, polyps, Endometriosis and Adenomyosis.
k. Tumours of the endometrium.

Pathology of the Central and Peripheral Nervous System

Objectives

1. Define each central and peripheral nervous system disorders processes in the context of anatomical pathology
2. Establish the anatomical basis and the pathophysiology outcomes
3. Highlight the morphological features and differential diagnosis
4. Highlight the disease modifiers and complications

Course Outline

a. Anatomy, embryology of the CNS and PNS,
b. Vascular malformations,
c. Pyogenic meningitis,
d. Cerebrovascular accidents,
e. Tumours of the PNS and CNS

MAF 404 TROPICAL PATHOLOGY 2 Units

Objectives

1. Establish the principles of microbial pathogenesis
2. Highlight the morphological features, differential diagnosis and clinicopathological correlations

3. Highlight the disease modifiers and complications

Course Outline

1. General principles of microbial pathogenesis
2. Pathology of malaria,
3. Schistosomiasis
4 Leishmaniasis
5 Amoebiasis
6. Typhoid fevers (syndromes and scope)

7. Leprosy
8. Syphilis
9. Onchocerciasis
10. Elephantiasis
11. Trypanosomiasis etc

MAF 406 Principles of Forensic Medicine/ Legal Aspects of Medical Practice 1 Units

Objectives

1. Define Forensic Medicine, the scope, and components such as Laws relating to Medical Practice, Clinical Forensic Medicine. Toxicology and Forensic Pathology.
2. Teach the principles of forensic medicine, medical law, and ethics.
3. Emphasize the uniqueness of individual patients and that all consultations are potential medicolegal cases
4. Train medical students on how to assist the law courts as unbiased expert witnesses
5. Highlight the typical morphological findings in forensic disorders
6. Teach how to write medico-legal reports
7. Teach how to be an expert witness.
8. Highlight the codes, ethics and laws that guide the practice of medicine that is medical jurisprudence.

Course content

a. Overview of Forensic Medicine and the role of the autopsy in Sudden Unexpected Deaths
b. Deaths from Asphyxia
c. Firearms Injuries and Wounds
d. Dangerous Drugs and Death from Poisons
e. The Doctor in Court as Expert Witness
f. Sexual Disorders

g. Medical Certificates, End of life issues, Euthanasia, the pathophysiology of death and Death
   Certification
h. Medical Acts and Medical Councils
i. Medical Ethics: - Consent, Negligence, Secrecy, documentation etc.
j. Abortion related deaths,
k. Medical Jurisprudence: the codes, the Laws and Ethics that guide medical practice

Each lecture should have:

a. A set of expected learning outcomes
b. Problem based discussions and assignments.
c. Further reading suggestions

ORGANOGRAM

The current Head of Department is Dr. O.O. Olaofe, a Senior lecturer.

Below are the past Heads of Department.

1. Prof. W.O. Odesanmi (1979 – 1989)
2. Prof. Olusegun Ojo (1990- 2004, 2016-2019)
3. Prof. K.A. Adelusola (1998-1999, 2004-2007)
4. Prof. B.J. Olasode (2007-2010)
5. Prof. Mrs. G.O. Omoniyi-Esan (2011-2012, 2015-2016)
6. Prof. A.O. Komolafe. (2012-2015, 2021-2023)
7. Dr. O.O. Olaofe (2019-2021, 2023- date)

LIST OF ACADEMIC STAFF

	Name	Qualification	Area of Interest
1.	Prof. Sylvester Olusegun Ojo	M.B.B.S, FMCPath, M.D.	GIT pathology
2.	Prof. Babatunde Josiah Olasode	M.B.Ch.B, FWACP	Neuropathology and Dermatopathology

3.	Prof. (Mrs.) Ganiat Olutoyin Omoniyi-Esan	M.B.B.S, MPhil, FMCPath	Breast and Gynaecological Pathology
4.	Prof Akinwumi Oluwole Komolafe	M.B.Ch.B, LLM. FMCPath.	Forensic Medicine
5.	Dr. Olaejirinde Olaniyi Olaofe	M.B.B.S, FMCPath	Musculoskeletal and Gynaecological Pathology

TECHNICAL AND ADMINISTRATIVE STAFF

	Name	**Status**	**Qualification**
12.	Margaret Olufunke Owobamirin	Principal Executive Officer II	WAEC (1982), NECO (2010), OND
13	Asiyanbi Simon Oyeyemi	Data Entry/Secretarial assistant	HND (2015)

Dr. O.O. Olaofe

Ag. Head of Department