Chapter V-

THE DESCRIPTIVE PROTOCOL FOR AUTOPSY CASES

- For some time, medicine was **dominated by pathology** and every professor of medicine or surgery had extensive autopsy-experience and interest.
- Hence, the **autopsy room was the center of research activities**, and, doing an autopsy was considered a great privilege.

- Later on, the interest in the autopsy has been declined by the increasing reliance on **experimental pathology** and functional aspects of disease as a means of acquiring medical knowledge.

- Nevertheless, there is no doubt upon the **invaluability of autopsies to the profession**, their importance in
  - **The teaching of medical students** and **post-graduates** and
  - Their help **to the clinician to test the diagnosis** and
  - **To the surgeon as an instruction in the end-results of some operations**.
- It is reasonable therefore to attract the interest of medical students to the educational value of autopsies.

- **The old way of doing the autopsy** in **the so-called morgue** has changed in the University or Teaching Hospitals.
- New modern buildings are established for the purpose of autopsy dissection and autopsy-demonstration classes.
- They have replaced that underground humid, dim and smelly old-fashioned room where dead bodies are accumulated and where the staff were obliged to carry out their work (dissection) or new ideas (teaching) under the most disadvantageous circumstances.
- Advantages are taken of space, simplicity, day-light and improvements in artificial light, aeration, equipment and installations.
- This has allowed for modern techniques, easy dissection, visible demonstration-classes and perfect management.

- **The routine method of performing the autopsy can be modified and simplified** to secure sound information of immediate utility to the clinician in charge of the case and to guarantee that the effort would not go to waste.
- For ordinary (routine) cases, only few systems may be dealt with.
- Interesting cases and those **of particular scientific and diagnostic features** may be dealt with more fully.
- Where research work or statistical studies are needed, more care, performance and data should be given.
- The students, physician or surgeon, personally-interested in the case, **have to attend, and preferably to assist in performing, the autopsy.**

- **The old way of writing the autopsy report** has been changed and is so arranged that the clinician or the specialist can ask for **(or lay stress upon) particular organs and systems** – in which he is interested — to be autopsied or-and reported upon.
- In a teaching hospital, **"standard forms"** have been issued in order to facilitate processing
  1. **Autopsy Request Form:** This is filled in by the resident and signed by one of the clinical staff; (Form "A" of one page is suggested).
  2. **Necropsy Protocol Form:** This can be supplemented by drawings and sketches for illustrative purposes (Fig. 8); (Form "B" of few pages is suggested).

- Further interests in other directions in autopsies more than simply the anatomic are in the field of **chemical pathology** of diseased organs and in offering sufficient material for experiments which would give results of immediate importance to clinical medicine and surgical techniques.

AUTOPSY REQUEST FORM (Form A.)

Name:	Sex:	Date of Admission:
Ward:	Age:	Date of Death (& h.)
Section:	Occupation:	Date of Autopsy (& h.):
Hospital No.:	Marital Status:	Autopsy Operator:
Autopsy No. :	Residence:	Reviewed by Dr.:
Remarks:	Death is: Natural Not Natural.	

Clinical Diagnosis:
Clinical History:
Symptoms and Signs:
Duration:
Investigations:
Blood
Urine
Stools
Lab. Tests
X-Ray
Biopsy (1-Notes)
Treatment:
Medical: A
Surgical:
Post-Operative:

Suspected Causes of Death:

Date:	*Signatures:*
Remarks:	Resident of Clinical Section: Chief of Clinical Section: Pathologist in Charge:

AUTOPSY REPORT (Form B - P. 1.):

Main University Hospital:		Autopsy No. :	
Department of Pathology:		Dr. Operator:	

Name:		Sex:		Date of Admission:	
Section:		Age:		Date & hour of death:	
Hospital No. :		Occupation:		Date & hour of P.M.:	

DIAGNOSTIC SUMMARY

Morbid Anatomy
Morbid Histology
Clinical

Form B. - Autopsy No.

NECROPSY PROTOCOL

A. Gross Description

I - General Features and External Description:					
Apparent age:		Weight:		Height:	
Nutrition:		Rigor Mortis:		Livor Mortis:	
		Skin			
Icterus		Colour:		Hydration:	
Pallor:		Pigmentation:		Eruptions:	
Petechiae:		Wounds:		Scars:	
Tumours:					
Subcutaneous Tissue					
Colour:		Thickness:		Edema:	
Hair					
Colour:		Distribution:			
Eyes (R - L)					
Colour		Pupils:		Conjunctiva:	
Sclera:					
Ears (R - L)					
Blood:		Pus:		Lesions:	
Nose					
Pus:		Lesions:		Nares:	
Blood:		Septum:			
Lips					
Cyanosis:		Lesions			
Gums					
Pyorrhea					
Teeth					
Present:		Absent			
Mouth					
State of mucosa:					

Neck					
Thorax					
Abdomen					
Arms (R - L)					
Edema:		Haemorrhages:		Lesions:	
Legs (R - L)					
Edema:		Haemorrhages:		Varicosities :	
Ulcers:					
Back					
Rash:		Deformities:		Lesions:	
Breasts (R - L)					
Size:		Nipple:		Areola:	
Lumps:		Discharge:			
Genitalia (Penis-Scrotum) (Vulva-Vagina):					
Development:		Edema:		Lesions:	
Anal Orifice					
II - Body Cavities.					
Peritoneal Cavity					
Fat of A. Abdominal Wall					
Colour		Character:		Thickness:	
Peritoneal Fluid					
Amount:		Nature:			
Adhesions					
Site:		Nature:			
Liver Edge (R. - C.M.)					
A:		Below:			
Dome of Diaphragm					
Right		Left			
State of Portal Vein					
State of Ureter					
State of Bladder					
Thoracic Cavity					
Mediastinum					
Thymus Gland					
Pleural Sacs (R – L)					
Nature of Fluid			Amount		
Adhesions		Location			
Pericardial Sac					
Nature of Fluid				Amount	
Epicardium					
State of Pulmonary Artery					
State of Aorta					
III - Cardio-Vascular System.					
Heart					
Shape		Consistence		Weight	
Colour		Position			
Surface (Visceral Pericardium)					
Foramen Ovale			***Interventricular Septal Defects***		
Atria		***Left***		***Right***	
Capacity					
Contents					
State of Endocardium					
Wall					
Septum					
Auricle	Thrombi				
Ventricles		***Left***		***Right***	
Capacity					
Contents					
State of Endocardium					
Wall thickness					
Septum					
Papillary Muscle:					
Chordae Tendinae					
Thrombi					
Valves		***Mitral***		***Tricuspid***	
Circumference of Ring					

Translucent or Opaque					
Vegetation					
		Aortic		***Pulmonary***	
Circumference of Ring					
Translucent or Opaque					
Fusion of Cusps					
Fenestra:					
Vegetation					
Coronary Orifices		***Left***		***Right***	
Patency					
Obstruction					
Coronary Arteries		***Left***		***Right***	
Straight					
Tortuous					
Atherosclerotic					
Thrombosed					
Mural Thrombi					
Aorta		***Thoracic***		***Abdominal***	
Anomalies					
Stenosis					
Dilatation (Aneurism)					
Elasticity					
Atheroma					
Ulceration					
Calcification					
Thrombosis					
Systemic Arteries					
Vena Cava					
Systemic Veins					
IV — Respiratory System					
Larynx		***Right***		***Left***	
Epiglottis					
Arytenoids					
Cords					
Trachea					
Bronchi		***Right***		***Left***	
Mucosa					
Contents					
Pulmonary Arteries					
Pulmonary Veins					
Lungs		***Right***		***Left***	
Weight					
Volume					
External Surface					
Adhesions & Location					
Cut Surface					
Colour					
Consistence					
Consolidation & Site					
Tuberculosis					
Atelectasis & Site					
Emphysema					
Lesions & Site					
Lymph Nodes					
V - Digestive System.					
Buccal Cavity & Palate					
Tongue					
Tonsils		***Right***		***Left***	
Salivary Glands					
Pharynx					
Esophagus					
Mucosa		**Lumen**		**Varicosities**	
Stomach					
Size		**Mucosa**		**Ulcers**	
Contents (Nature)			**(Amount)**		
Other Lesions & Location					

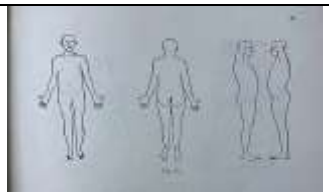
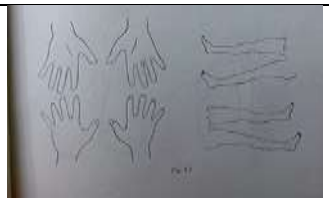
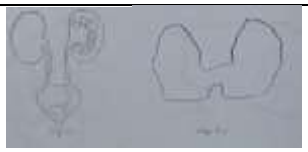
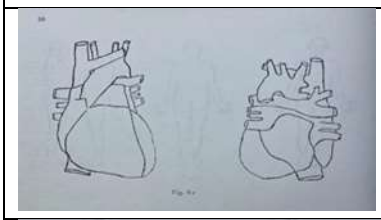
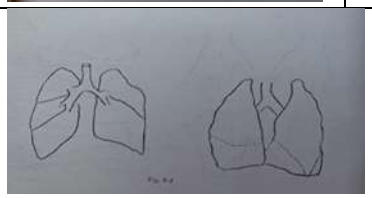
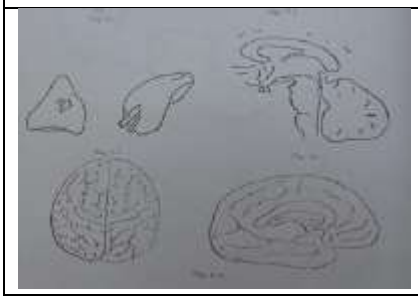
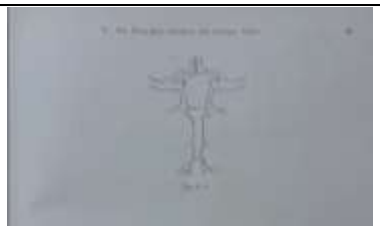
Duodenum					
Mucosa		Ulcers			
Ampulla of Vater					
Small Intestine		*Jejunum*		*Ileum*	
Peritoneal Surface					
Mucosa					
Ulcers					
Contents					
Lesions & Location					
Vermiform Appendix					
Position		Size in Cm.		Serosa	
Mucosa		Lumen		Bilharziasis	
Oxyuriasis					
Caecum					
Colon		Ascending :		Transverse :	
Descending :		Sigmoid :		Rectum :	
Anal Canal :		Bilharziasis & Location (Scrapings)			
Liver					
Weight in G		Size : in Cm.		Capsule :	
External Surface		Colour		Cut surface	
Fibrosis & Location				Consistence	
Other Lesions & Location					
Portal Vein					
Thrombosis		Parasites		Other Lesions	
Gall Bladder					
Wall		Cavity		Mucosa	
Stones		Stones Type		Stones No.	
Contents (Nature)			(Amounts)		
External Bile Ducts					
Wall		Lumen		Mucosa	
Stones					
Pancreas					
Weight: in G		Size: in Cm.			
Colour		Cut Surface		Consistence	
Mesenteries					
Omentum					
VI – Urinary System.					
Kidneys		*right*		*left*	
Weight					
Size					
Capsule					
External Surface					
Cut Surface					
Consistence					
Cortex					
Medulla					
Striations					
Infarcts					
Haemorrhage					
Stones					
Arteries					
Other Lesions & Location					
Pelvis & Calyces					
Lumen		Mucosa		Stones	
Other Lesions & Location					
Ureter					
Lumen		Mucosa		Stones	
Stricture		Bilharzia			
Other Lesions & Location					
Urinary Bladder					
Shape		Size		Mucosa	
Amount of Urine				Trabeculations	
Ulcers		Stones		Bilharzia	
Lesions & Location				Urethral Orifice	
Orifices of Ureters					
Urethra					
Mucosa		Obstruction		Stricture	

Stones		**Bilharzia**			
Other Lesions & Location					
VII – Genital System.					
Prostate					
Weight in G		**Size in cm**		**Cut Surface**	
Consistence		**Bilharzia**			
Obstruction & Location					
Seminal Vesicles					
Size		**Contents**		**Fibrosis**	
Bilharzia					
Testicles		***Right***		***Left***	
Weight					
Size					
Cut Surface					
Consistence					
Fibrosis					
Bilharzia					
Other Lesions & Location					
Epididymis					
Fibrosis			**Bilharzia**		
Other Lesions & Location					
Spermatic Cord					
Female genital					
Uterus		***Body***		***Cervix***	
Shape					
Size					
External Surface					
Wall					
Mucosa					
Lacerations					
Fibroids & Location					
Other Lesions & Location					
Fallopian Tubes		***Right***		***Left***	
Patency					
Wall					
Serous Coat					
Mucosa					
Lesions & Location					
Ovaries					
Cysts		**Weight**		**Size**	
Corpus Luteum:					
Corpus Albicans					
Other Lesions & Location :					
Vagina					
VIII — Haemo-Lymphatic System					
Spleen					
Weight : G		**Size**		**Capsule**	
External Surface				**Edge**	
Cut Surface		**Colour**			
Consistence of Pulp			**Malpighian Corpuscles**		
Infarcts		**Lesions & Location :**			
Splenic Vein					
Lymph Nodes					
Bone Marrow					
Pale & Location					
Red & Location					
Fatty & Location					
IX – Endocrine System					
		Weight		**Size.**	
Pituitary Gland					
Thyroid Gland	**Right**				
	Left				
Parathyroids,	**Right**				
	Left				
Adrenal Glands	**Right**				
	Left				

Other Findings & Location					
X - Nervous System					
Brain					
Weight		**Size**		**Dura**	
Pia Arachnoid		**Ext. Surface**		**Cut Surface**	
Variation in Consistence			**Haemorrhage & Location**		
Infarct & Location			**Venous Sinuses**		
Ventricles		**Arteries**		**Base of Skull**	
Choroid Plexus			**Cerebro-spinal Fluid**		
Cranial Nerves					
Prostate					
Glandular elements					
Stroma					
Bilharzia					
Seminal vesicles					
Mucosa					
Bilharzia					
Epididymis					
Testes					
Tunica					
Seminiferous tubules					
Spermatogenesis					
Atrophy					
Interstitial cells of Leydig					
Bilharzia					
Uterus					
Endometrium					
Myometrium					
Hyperplasia					
Atrophy					
Cervical portion					
Vagina					
Mucosa					
Other layers					
Ovaries					
Follicles					
Cysts					
Stroma					
Vessels					
Adrenals					
Cortex					
Medulla					
Vessels					
Thyroids					
Acini					
Hyperplasia					
Stroma					
Colloid					
Degeneration					
Vascularity					
Brain					
Meninges					
Parenchyma					
Vessels					
Spinal Cord					
Peripheral Nerves					
Calvarium					
Middle Ear					
Sphenoid Sinus					
XI – Musculo skeletal System					
Bones					
Vertebrae					
Discs & Location					
Lipping & Location					
Exostoses & Location					
Long Bones					
Flat Bones					
Joints					

Skeletal Muscles	
Tendons	
Bursae	
Ligaments	
Skin	
Subcutaneous Tissue	
Bacteriology	
Museum-Specimens	
Frozen & Special Studies	
Photographs	
(b) Other organs or tissues principally involved:	
Clinico-Pathologic Correlation*	
SUMMARY**	
* Each lesion seen during the autopsy dissection should be accounted for in the microscopic diagnosis and correlated with the clinical features so that the death of the patient can be attributed to specific lesions.	
** SUMMARY**	
1. To evaluate the pathological findings with the clinical ones.	
2. To elucidate the pathogenesis of illness.	
3. To assess the effect of treatment (therapeutic, isotopic or surgical) on the change found.	
4. To make use of the informations gained from this particular autopsy case.	

(B) Microscopic Description.	
(a) The following organs (in general), may be one on two (in particular)	
Heart	
Pericardium	
Myocardium	
Endocardium	
Valves	
Interstitial Tissue	
Blood vessels	
Lungs	
Pleura	
Alveoli	
Bronchi	
Interstitial tissue	
Blood vessels	
Liver	
Capsule	
Structure	
Lobules	
Zones	
Portal tracts	
Interstitial tissue	
Gall bladder	
Mucosa	
Other coats	
Calculi	
Pancreas	
Acini of parenchyma	
Ducts	
Vessels	
Islets of Langerhans	
Bilharzia	
Spleen	
Capsule	
Lymphoid follicles	
Red pulp	
Trabeculae	
Vessels	
Kidneys	

Capsule	
Glomeruli	
Tubules	
Interstitial Tissue	
Vessels	
Calculi	
Pelvis of Kidney	
Ureter	
Bladder	
Mucosa	
Other layers	
Calculi	
Bilharzia	
	 
	
	

- By this means, some of the difficulties which have commonly faced both the clinician and the pathologist are overcome.
- The “Forms" may be prepared as to allow separate sheets for certain systems so that only those organs or systems demanded can be reported upon.
- For research work or particular cases of scientific value, however, a full report can be offered.
- In "Form B”, the starting sheet is for the clinical and pathological diagnosis and the patient's identifying features.
- The next few sheets are for complete gross description of the autopsy findings.
- The report is so arranged as to follow a certain order.
- The last sheets are for the microscopic description of the lesions followed by a clinico-pathologic correlation (where each major symptom or sign is correlated with the pathologic lesion found) and then a summary.
- This report is kept bound into the “Protocol Book” with the illustrative specimens, slides, photographs and summary of the hospital's course (prepared by the clinician) in the department of pathology; a copy of the report is offered to the clinician.
- Autopsy reports, thus, become no more time — consuming or difficult in typing.
- The autopsy protocols are ready-printed sheets which are precise, systematic and which facilitate registration of the findings.
- Such a system when known by the student (future clinician) will regulate and facilitate the work.
- Not only there is lessening of the time and effort consumed, but also the follow up of lesions will be easy for future statistical and research work.
- This system ensures more understanding and scientific co-operation between the clinician and the pathologist for the sake of diagnosis, treatment and better management of future patients.
