

**Final anatomical diagnosis :**

1. Disseminated carcinomatosis S/P modified radical mastectomy of left breast and total thyroidectomy (carcinomatosis in bilateral lungs, trachea, diaphragm, mediastinal lymph nodes, hepatic vessels, gall bladder and cystic duct, pancreas, vertebrae, skull bone, left kidney and skin of left breast.
2. Uterus, leiomyoma.

**Clinical summary :**

This 36-year-old female received mastectomy of left breast and total thyroidectomy at local medical department several years ago. She was sent to our emergency room on account of respiratory distress and conscious disturbance in early. February, 94. physical examination revealed an emaciated women with cachexia looking. The conjunctiva was pale and the lips were dry. The breathing sound was rapid and coarse. On auscultation, her heart was fast but no murmur heard. There was an elevated, ulcerative lesion measuring 4 x 2 x 2 CM along the surgical wound of left breast. The liver was impalpable. The patient could not walk because of pathological fracture of bilateral legs. There was remarkable length discrepancy in the lower extremities with short right femur. Chest X-ray showed multiple small nodules in bilateral lungs and vertebrae. The overall appearance of the patient revealed a picture of systemic metastatic tumor. Conservative treatment was considered. The patient finally died on 18 FEB, 94. (Clinical chart is not available for detail history).

**Autopsy findings :**

(1) Body and external appearance :

Weight	45 Kg	Development	Poor
Length	152 CM	Nutritional state	Poor
Cachexia looking			
Length discrepancy of bilateral low extremities right femur is shorter.			
Carcinomatous of skin measuring 4 x 2 x 2 CM at the previous.			
Surgical scar of left breast (S/P mastectomy).			
Right side chest tube insertion mark.			

(2) Body cavities :

Pleural	Pleural effusion	
	Right : 1500 C.C.	Left : 1500 C.C.
	Extensive adhesion to the bilateral lung	
Peritoneal	Ascites, 500 C.C.	
Pericardial	Pericardial effusion, 50 C.C.	

(3) Cardiovascular system :

Greater vascular structures	
Gross	Aorta
Microscopic Diagnosis	Unremarkable

Heart General :			
Weight	223 GM	Septum	2 CM
Left ventricle	1.2 CM	Pulmonary valve	4 CM
Right ventricle	0.5 CM	Aortic valve	5 CM
Tricuspid valve	7 CM in circumference		
Mitral valve	6 CM in circumference		

Heart	Gross	Microscopic Diagnosis
Valves	Unremarkable	Unremarkable
Epicardium	Unremarkable	Unremarkable
Myocardium	Unremarkable	Unremarkable
Endocardium	Unremarkable	Unremarkable
Coronary arteries	Unremarkable	Unremarkable
Right breast biopsy		Unremarkable

(4) Respiratory system :

Trachea and major bronchi	
Gross	Contents : Mucous secretion
	Mucosa : Rough
Microscopic Diagnosis	Diffuse submucosal metastatic carcinoma infiltrating.
	Cartilage is not invaded.

Mediastinum	
Microscopic Diagnosis	Metastatic carcinoma seen

Lung				
Weight	Right	400 GM	Left	400 GM
Gross	Multiple metastatic lesions Near hilum measuring up to 3 x 2 x 2 CM.			
	Variegated appearance of Bilateral lungs.			
	Marked adhesion of right lung to the diaphragm.			
Microscopic Diagnosis	Diffuse metastatic carcinoma in bilateral lungs with necrosis and tumor thrombi in pulmonary vessels.			

(5) Gastrointestinal Tract :

Gastrointestinal Tract	Gross	Microscopic Diagnosis
Pharynx	Unremarkable	Mild erosion
Esophagus	Unremarkable	Mild erosion
Stomach	Empty in content	Autolysis
Duodenum	Unremarkable	Autolysis
Small bowel	Unremarkable	Autolysis
Large bowel	Unremarkable	Autolysis

Pancreas	
Weight	107 GM
Gross	Diffuse metastatic lesions over the pancreatic head.
	The whole pancreas is indurated.
Microscopic Diagnosis	Diffuse metastatic carcinoma infiltration.

(6) Hepatobiliary system :

Liver			
Weight	1200 GM	Outer surface	Smooth
Size	20 x 10 x 8 CM.	Cut surface	Homogenous tissue
Microscopic Diagnosis	Metastatic lymph nodes and tumor infiltration seen in large hepatic vessels.		

Gallbladder, Bile ducts	
Size	10 x 5 x 3 CM.
Gross	Distended by bile juice
Microscopic Diagnosis	Autolysis Some scattered carcinoma cells are seen.

(7) Hematopoietic-Lymphoid system :

Spleen			
Weight	50.3 GM	Size	10 x 5 x 2 CM.
Microscopic Diagnosis	Congestion		

Bone Marrow	
Gross	Necrotic cut surface of thoracic vertebrae.
	Multiple metastatic tumor nodule in the skull bone.
Microscopic Diagnosis	Diffuse metastatic carcinoma infiltration with bone destruction.

(8) Urogenital system :

Kidney				
Weight	Right	108 GM	Left	171 GM
Gross	Necrotic nodule measuring 1 x 1 CM seen in the lower pole of left kidney.			
Microscopic Diagnosis	Metastatic carcinoma with abscess formation in left kidney.			

Urogenital system	Gross	Microscopic Diagnosis
Ureters	Unremarkable	Unremarkable
Bladder and urethra	Unremarkable	Unremarkable

Uterus	
Size	9 x 4 x 3 CM.
Gross	A small leiomyoma measuring 0.3 x 0.3 CM in the intramural wall of the uterus.

Ovaries				
Size	Right	2.5 x 1 x 0.5 CM	Left	2 x 1 x 0.5 CM
Microscopic Diagnosis	Leiomyoma in myometrium corpus albican in bilateral ovaries.			

(9) Endocrine system :

Endocrine system	Gross	Microscopic Diagnosis
Thyroid	Absence of thyroid gland	
Parathyroid	Absence of parathyroid gland	
Adrenals	Right : 4.2 GM	Autolysis
	Left : 3.9 GM	

(10) Central nervous system :

Central nervous system	Gross	Microscopic Diagnosis
Brain	Weight : 1050 GM	Unremarkable No metastatic carcinoma seen.
	Shape : Symmetry	
	Mild cortex atrophy	
Leptomeninges	No adhesion	
Cranial nerves	Intact	
Circle of Willis	No arteriosclerosis	
Spinal cord	Intact	

**Section Taken and Labeled as :**

<b>Labeled</b>	<b>Section Taken</b>	<b>Labeled</b>	<b>Section Taken</b>
<b>LL1-4</b>	Left lung	<b>RK1-2</b>	Right kidney
<b>RL1-5</b>	Right lung	<b>LK1-3</b>	Left kidney
<b>TC 1-2</b>	Trachea	<b>U</b>	Bilateral ureter
<b>LVC</b>	Left vocal cord	<b>UB</b>	Urinary bladder
<b>RVC</b>	Right vocal cord	<b>EM</b>	Endometrium of uterus
<b>E</b>	Esophagus	<b>M</b>	Myometrium of uterus
<b>ST1-2</b>	Stomach	<b>RA</b>	Right adnexa
<b>SI</b>	Small intestine	<b>LA</b>	Left adnexa
<b>PAN1-4</b>	Pancreas	<b>C 1-2</b>	Cervix
<b>L1-3</b>	Liver	<b>AD</b>	Adrenal gland
<b>GB 1-2</b>	Gallbladder	<b>T1-2</b>	Tumor nodule of skins
<b>S1-2</b>	Spleen	<b>RB</b>	Right breast tissue
<b>B1-4</b>	Brain	<b>L</b>	Lymph nodes of mediastium
<b>B1-3</b>	Thoracic vertebrae		
<b>CO</b>	Colon	<b>H</b>	Heart
<b>HV</b>	Hepatic artery and vein	<b>A</b>	Aorta