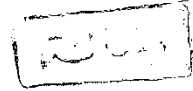


# **Computed Tomography In Diagnosis Of Primary Hepatic Neoplasm**

## **Thesis**



Submitted For Partial Fulfillment Of  
M.S degree in **Radiodiagnosis**

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## List of Abbreviations

AHN	Adenomatous hyperplastic nodule.	
CH	Cavernous hemangioma.	228
CTAP	CT arterial portography.	2
CTHA	CT during hepatic arteriography.	62
EHE	Epitheloid hemangioendothelioma.	62
FLC	Fibrolamellar carcinoma.	18
FNH	Focal nodular hyperplasia.	666
HBV	Hepatitis B virus.	
HCA	Hepatocellular adenoma.	2
HCC	Hepatocellular carcinoma.	2
IHE	Infantile hemangioendothelioma.	6
MRV	Macrodegenerative nodule.	
NRH	Nodular regenerative hyperplasia.	
SMA	Superior mesentric artery.	





## **Introduction and Aim of Work**



# **Anatomy of The Liver**

later, owing to the rotation of the gut, the opening is carried to the left and then dorsalward to the position it occupies in the adult.

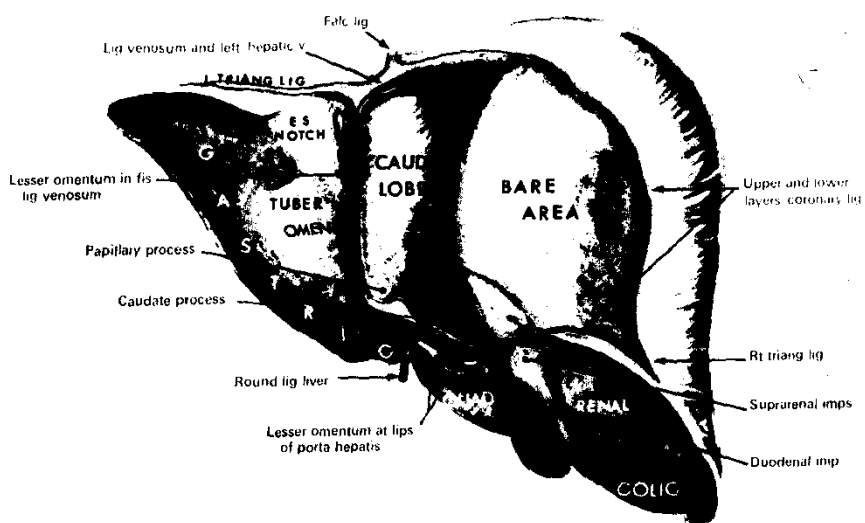
About the third month, the liver almost fills the abdominal cavity, and its left lobe is nearly as large as its right. From this period the relative development of the liver is less active, especially that of the left lobe, which actually undergoes some degeneration and becomes smaller than the right, but up to the end of fetal life the liver remains relatively larger than in the adult.

**Site: (Fig. 1).**

The liver (hepar), the largest gland in the body, is situated in the cranial and right parts of the abdominal cavity, occupying almost the whole of the right hypochondrium, the greater part of the epigastrium, and not uncommonly extending into the left hypochondrium as far as the mammary line (*Clemente, 1985; Hollinshead, 1985*).

**Shape, surfaces, and borders:**

The liver is irregularly hemispherical in shape, with an extensive, relatively smooth, convex diaphragmatic surface and a more irregular concave visceral surface. The diaphragmatic surface has four parts: Ventral, superior, dorsal, and right. The human liver has four lobes; a large right lobe, a smaller left lobe, and much smaller caudate and quadrate lobes (*Clemente, 1985*).



**Fig. (1): Liver from behind:**

- \* *The peritoneum has been cut along the line of its reflexion from the liver surface the cut edge is coloured yellow*
- \* *Quoted from jamieson's illustrations of regional anatomy 9th edition.*

**Diaphragmatic surface: (Fig. 2):**

Is dome-shaped and conforms to the concavity of the undersurface of the diaphragm. This surface is extensive and is divisible into superior, anterior, right, and posterior parts. The superior surface is related, through the diaphragm, with the base of the right lung, the pericardium and the heart, and (on its extreme left) with the base of the left lung. The heart accounts for a shallow fossa, the cardiac impression where it rests upon the liver. The posterior and right parts of the diaphragmatic surface are large and are in contact with the diaphragm and the lower ribs. The posterior surface includes most of the bare area between the reflections of the coronary ligament and contains a sulcus for the inferior vena cava. The anterior and superior surfaces are subdivided by the falciform ligament. The anterior surface lies against the diaphragm, the costal margin, the xiphoid process, and the abdominal wall (*Wood Burne, 1978*).

**Visceral surface:**

The visceral surface is concave, facing dorsalward, caudalward, and to the left (Figs. 3 & 4).

It contains several fossae and impressions for neighboring viscera. A prominent marking of the left central part is the porta hepatis, a fissure for the passage of the blood vessels and the bile duct. The visceral surface is covered by peritoneum except where the gall bladder is attached to it and at the porta.