CT STUDY IN INFLAMMATORY BOWEL DISEASES AND RELATED CONDITIONS

THESIS

Submitted for Partial Fulfillment of Master Degree
in
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M.M

By

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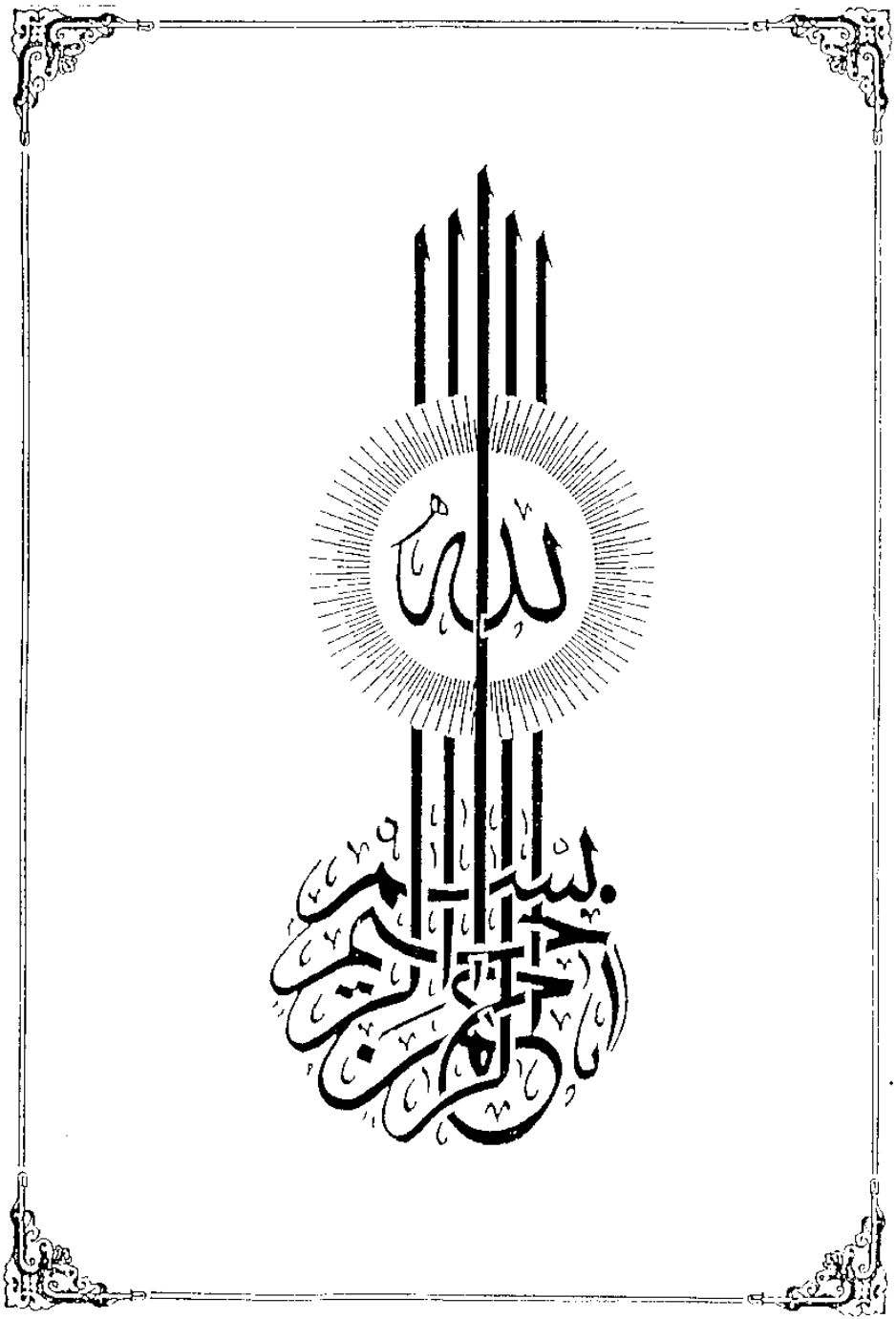

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TO MY PARENTS...

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INTRODUCTION

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INTRODUCTION

Computerized tomography (CT) has a well established role in the diagnosis of a variety of small bowel diseases, due to its superior density discrimination which is important for these inflammatory diseases as it extens beyond the mucosa.

On every CT image of the abdomen portions of the gut are visualized, so that specific evaluation of the bowel should be included and this is the value of CT.

The aim of this work is to study the CT examination of the inflammatory bowel diseases in a trial to say that CT seems to be a sensitive modality.

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ANATOMY

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THE BASIC ANATOMY

The small itntestine is a coiled tube, extend from the pylorus to the ileocaecal valve, where it joins the large intestine.

It is usually said to be 6-7m long, gradually diminshing in diameter towards its termination. Length was correlated with the height of the individual but was independent of age (the large was much more constant in length). The small intestine occupies the central and lower parts of the abdominal cavity usually within the clonic loop, it is related in front to the greater omentum and abdominal wall, a portion may reach the pelvis in front of rectum. It consists of short curved coiled part attached to the posterior abdominal wall by the mesentery. The proximal 2/5 being the jejunum, the distal 3/5 being the ileum (Grey's 1989).

The duodenum:

The first inch of the duodenum is contained between the peritoneum of the lesser and greater omenta but the remainder of this part of the gut is entirely retro peritoneal. The duodenum is C shaped tube curved over the convexity of the forwardly projecting aorta and inferior vena cava, while the descending limb lies more posteriorly in the right paravertebral gutter (Gray's 1989). Fig. (1)

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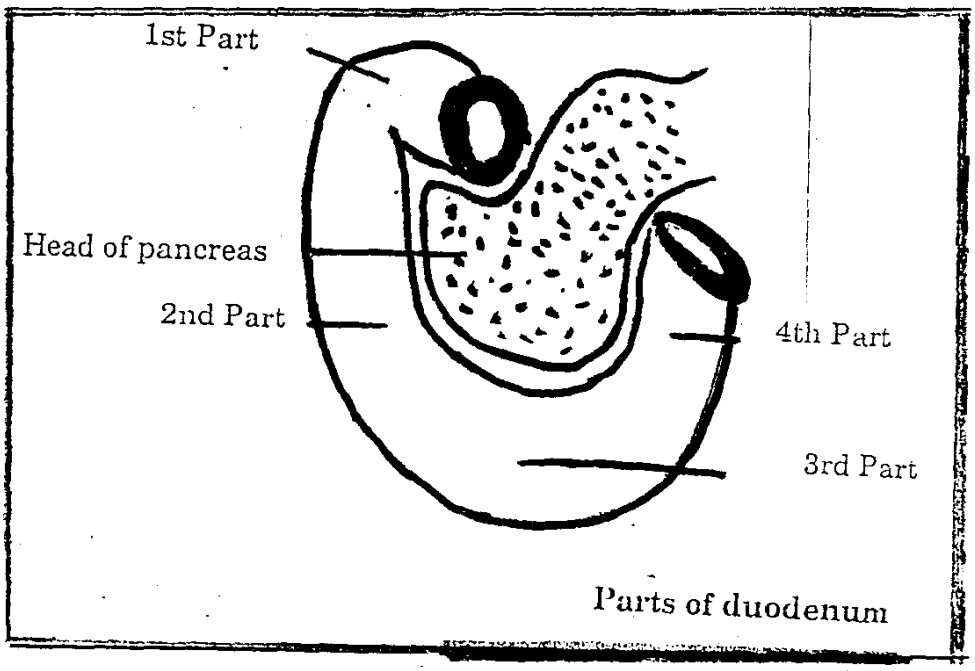

Fig. (1)

After Amin (1980)

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The duodenum is divided into four parts all of which run in different direction. The tube is 10 inches (25cm) long and the length of its parts are 2,3,4 and 1 inchs. The first part of the duodenum runs backward and somewhat upward from the pylorus (Gray's 1989). Fig. (2)

The first 2cm lies between the peritoneal fold of the greater and lesser omenta, it forms the lower most boundary of the opening into the lesser sac. The neck of the gall bladder touches the upper convexity of the duodenal cap. The next 3cm passes backward and upward on the right crus of the diaphragm and the right psoas muscle to the medial border of the right kidney, its posterior surface is bare of peritonum, it touch the upper part of the head of pancreas and is covered in front of peritoneum of the posterior abdominal wall (Gray's 1989).

The second part of the duodenum curves downwards over the hilum of right kidney. It is covered in front with peritoneum and crossed by the attachement of the transverse mesocolon so that its upper half lies in the supracolic compartment to the left of the hepatorenal pouch and its lower half lies in the right infracolic compartment medial to the inferior pole of the right kidney, it lies alongside the head of the pancreas (Gray's 1989).

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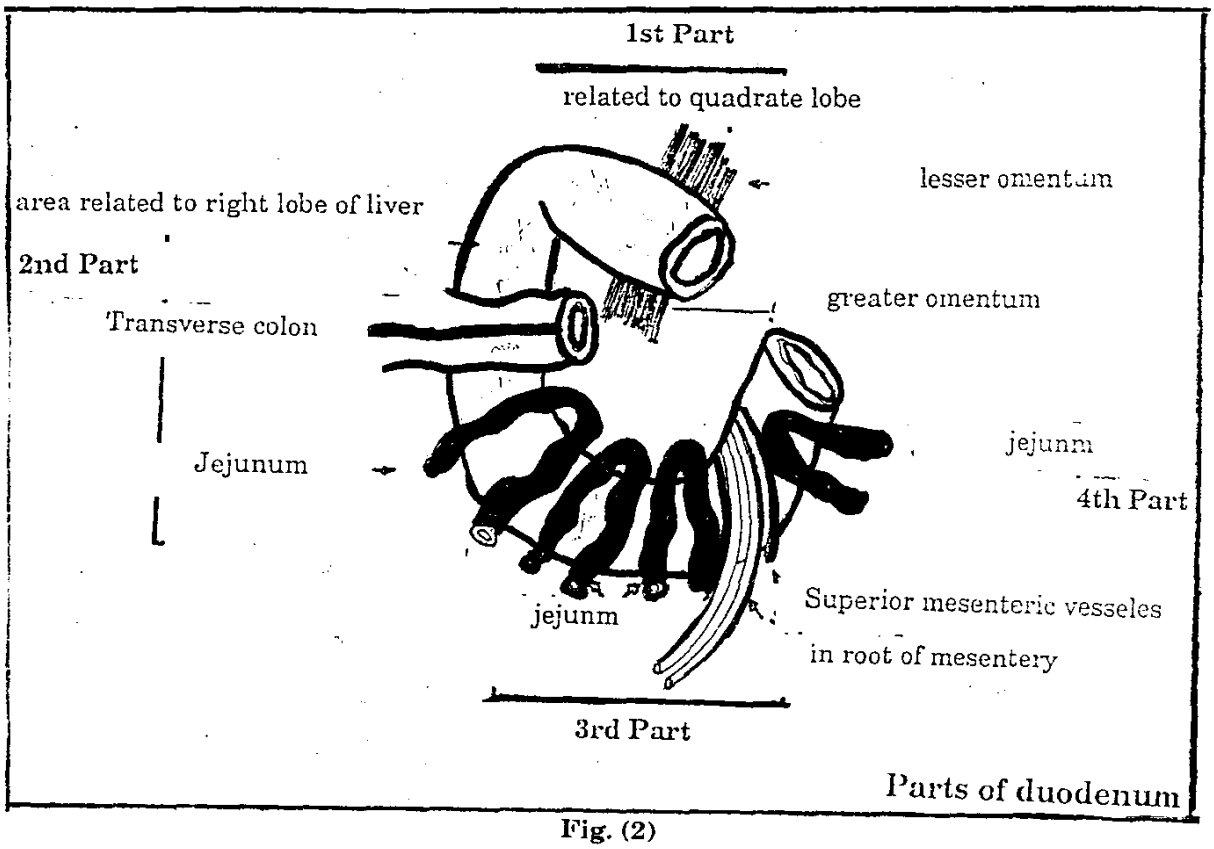

Fig. (2)

After Amin (1980)

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