STUDY OF SERUM AND MUCOSAL IGA IN CASES OF NON ULCER DYSPEPSIA

A THESIS

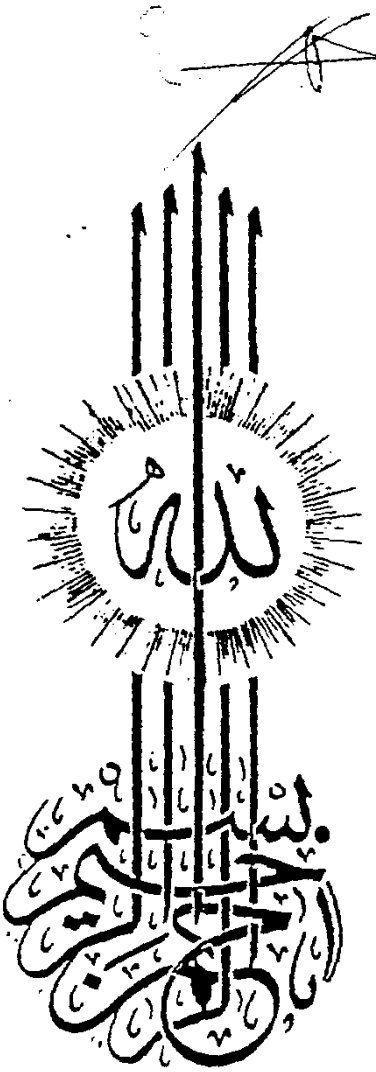
Submitted for the Partial Fulfilment
of the Degree of M. S.
(General Medicine)

By
SOAD MOHAMED EL DIGWY
M. B., B. Ch.

Supervisors
Prof. Dr. SAMI ABD ALLAH ABD EL-FATTAH
Prof. of Medicine
Faculty of Medicine, Ain Shams University
Assist. Prof. Dr. NABIL AZIZ SHOKRY
Faculty of Medicine, Ain Shams University

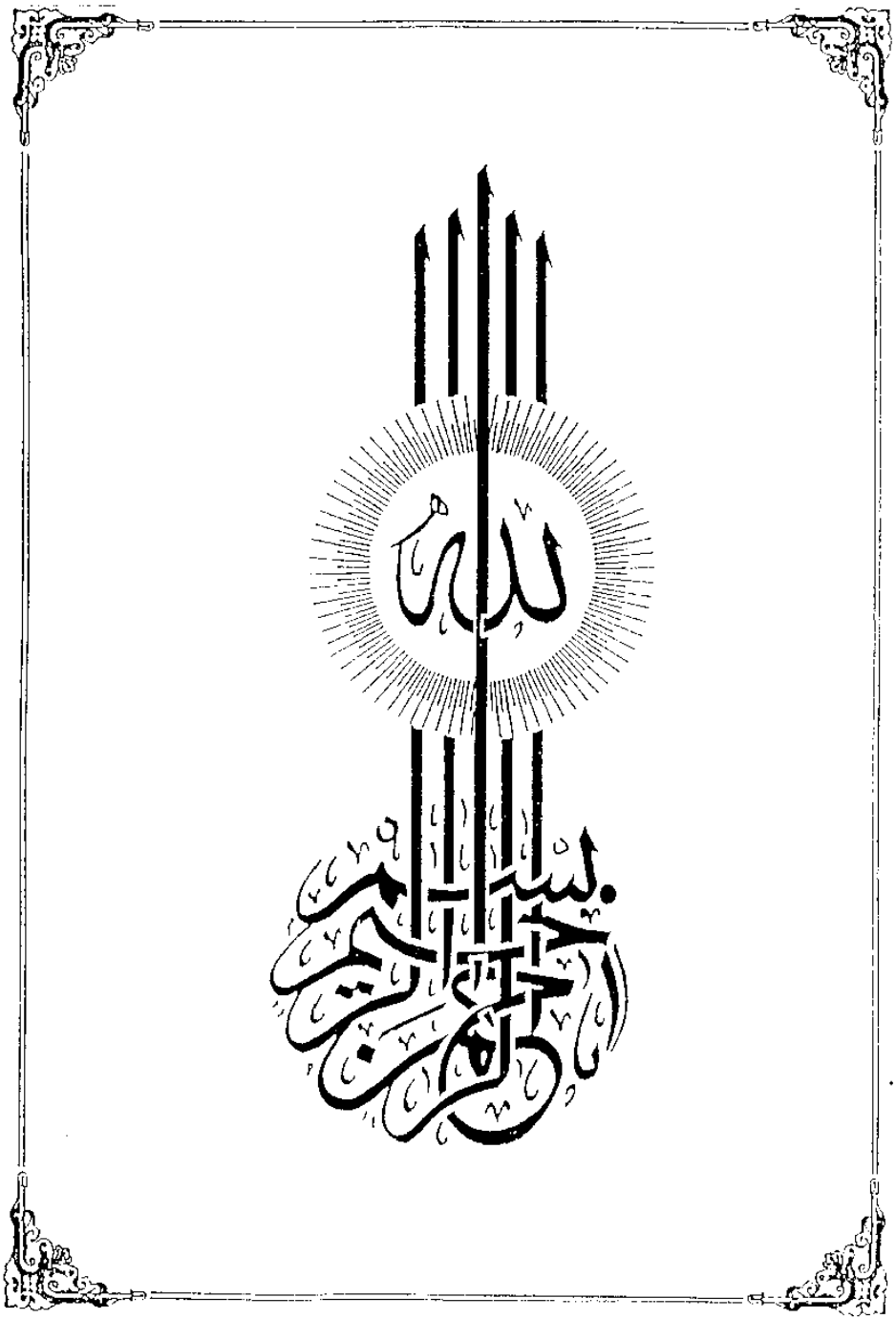
Faculty of Medicine
Ain Shams University

1984



وما توفيقي إلا بالله

صدق الله العظيم



ACKNOWLEDGEMENT

It is agreat pleasure to express my deepest gratitude to Professor Dr. Sami Abd El Fatah professor of general medicin, Ain Shams University and to Professor Dr. Nabil Azize Shokri Assistant Professor of general medicine Ain Shams University for their Sincere help, Fruitful Co-operation, and kind supper-vission. They have shosen the subject and were after every step by their guidance. It is a pleasure and honour to work under their guidance.

I am greatly thankful to the patients who were the subject of this study for their cooperation.

CONTENTS

INTRODUCTION AND AIM OF THE WORK

" Introduction and aim of the work"

The functional dyspepsia must be common, it can not however be considered non disease (Thompson 1979)

Some patients with non ulcer dyspepsia eventually develop Duodenal ulcer (weatherall 1983) so non ulcer dyspepsia is very important like any disease in G.I.T.

Many people who have no disease of alimentary tract find that certain foods disagree with them. of possible mechanisms that might give discomfort or other symptoms altration in gastric motility and acidity esophageal reflux and impairment of gall bladder function.

The gastro -intestinal mucosa is rich in Lymphocytes and plasma cells and is exposed to a myriad of potential antigens in food, in drugs, other chemicals and in micro-organisms, resulting in agreat variaty of antigen-antibody reactions. In addition it apparently has the capacity to form and react with autoantibodies as has been postulated in atrophic gastritis.

Any and all clinical phenomena resulting from antigen antibody reactions in the GIT are connoted by the term gastro-intestinal allergy. In the upper GIT it may present as gastritis (cecil Loeb 1971) this gastritis may present as functional dyspepsia. This prompted us to study the immunological immunological aspect of patients presenting by functional dyspepsia after excluding organic cause in the oesophagus, stomach or duodenum.

IgA was shosen for this study because of its known relation to the gastrointestinal tract being formed in its lamina propria or secreted in it (Taylor 1975).

REVIEW OF LITERATURE

"The Stomach and duodenum"

Anatomy (Hill-Mc Graw 1973)

Form and relationships:-

In adults the stomach lies obliquely from left to right across the upper abdomen between the liver and diaphragm above and transverse colon below. Its shape, size and position very depending on body build, posture, degree of gastric distension, effects of pressure exerted by adjacent organs, and gastric tonus. When empty it resembles J shaped tube, when distended agiant pears. When fulled, it is 25 to 30 cm long and its greatest transverse diameter is about 13 cm. Normally its capacity is between 1-2 liters.

The stomach has two orifices two borders, and two surfaces.

The orifices and upper border or lesser curvature are relatively fixed so that expansion of the gastric lumen is largly at the greater curvature or lower border. The stomach posses considerable mobility its position varies with diaphragmatic movements and changes in intrathoracic and intraabdominal pressure.

Thus with deep inspiration the stomach descends several inches, marked retraction of the anterior abdominal wall on the other hand may force the stomach upward. With distension, the stomach fills the left subphernic area pressing the apex of the heart upward. The greater curvature extends downwards into the left hypochondrium and in the prone position to about 2.5 cm above the umblicus.

The cardiac orifice measures about 2.5 cm in diameter and lies about 3 cm below the diaphragme at the level of the tenth thoracic vertebra, 2.5 cm to the left of mid line behind the seventh left costal cartilage.

The pylorus, lies about 1 cm the right of mid-line at level of the first lumber vertebra. Topographically the "transpyloric plane" bisectes a line drown from the suprasternal notch to the symphsis pubis.

The lesser curvature extends from the cardiac orifice to the pylorus in agentle downward curve about 7 to 12 cm in length attached to this border the lesser omentum or gastrohepatic ligament withen

this membrane lie the left gastric artery and vein, nerves, and lymphatic its right free margin contains the common bile duct hepatic artery and portal vein and as noted. Forms the anterior border of the opening to the lesser sac of peritoneal cavity.

The greater curvature is about four times as long as the lesser curvature and its contour is ballooned upward and outward and the proximal end to form the gastric fundus to it is attached the greater omentum which contain gastric epiploic artery and vein, nerves and lymphatic.

The posterior surface of stomach is in contact through the lesser sac of the peritoneal cavity with the pancreas, transverse mesocolon, splenic flexure of the colon, left kidney, left adrenal.

Arterial supply:-

It is supplied from the celiac artery and its branches.

1) Left gastric artery and right gastric artery to the lesse curvater.
2) Left gastro-epiploic artery and right gastroepiploic artery to the greater curvature.

3) Short gastric arteries to the fundus.

Anastomosis within the gastric wall:

Gastric and oesophageal arteries have free anastomoses, on the other hand anastomoses between the gastric and duodenal arteries is scanty.

The anastomoses between the gastric and oesophageal veins at the cardiac end is one of the site of porto systemic anastomoses.

Nerve supply:-

a) Anterior vagal trunk (gastric nerve) on the anterior surface of stomach and represents the left vagus (due to rotation of the stomach to the right).

b) Posterior vagal trunk on the posterior surface of stomach and represents the right vagus nerve.

c) Sympathatic fibres from the celiac plexus.

Lymph drainage:

The stomach is drained into the following lymph nodes:

Left gastric nodes accompany the left gastric vessls, Rt gastro-epiploic nodes along the Rt gatro-epiploic vessles, pyloric nodes behind the duodenum

at the angle between its first and second part (along the gastro-duodenal artery). All these lymph nodes drain into the celiac group of lymph nodes.

The duodenum, which joins the pylorus of stomach to the jejunum at the duodenojejunal flexu e, forms an incomplete C-loop with concavity directed to the left. It is devided into four portions, upper transverse cap or bulb, descending or second part lower horizontal or third part and ascending or fourth part.

The first portion begins at the pylorus and passes transversely or slightly upwards 3 to 4 cm to the right and backward over the Rt side of the vertebral column, vena cava and kidney pelvis. The shape of the bulb as seen by X ray is usually triangular or cone shaped. The bulb is in the peritoneal cavity and more distensible than remainder of the duodenum which is retroperitoneal. The first portion lies behind and below the Rt lobe and quadrate lobe of the liver and gall bladder and infront of common bile duct, the gastroduodenal artery, and the portal vein it is above and some what in front of the head of pancreas.

The second portion or descending limb, descends vertically 10 to 12 cm usually to the level of the Rt side of the fourth lumber vertebra (or umbilical plane on the body surface) the common bile and pancreatic ducts empty into this portion of the duodenum at the ampulla (of vater). An accessory pancreatic duct is present in 70 % of individuals and empties into the duodenum about 2 cm above the ampulla of vater. The descending limb of the duodenum lies infront of the vena cava, right renal; adrenal; and gonadal vessels; right ureter, and psoas muscle. It is crossed anteriorly by the root of the transverse mesocolon.

The third portion extends horizontally forward to the left and upwards 5 to 9 cm, crossing third or fourth lumber vertebra, the right crus of the diaphragm vena cava and aorta. It is crossed anteriorly by the superior mesentric vessels and the root of the mesentry of the small intestin.

The ascending fourth part of the duodenum, 2.5 to 6 cm long ascends along the left side of the aorta and terminates by turning sharply forward as the duodenojejunal flexure. It lies below the transverse