CARCIOMA OF THE STOMACH

ESSAY
Submitted In Partial Fulfilment
Of Master Degree In

(GENERAL SURGERY)

By

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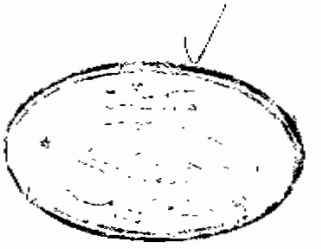


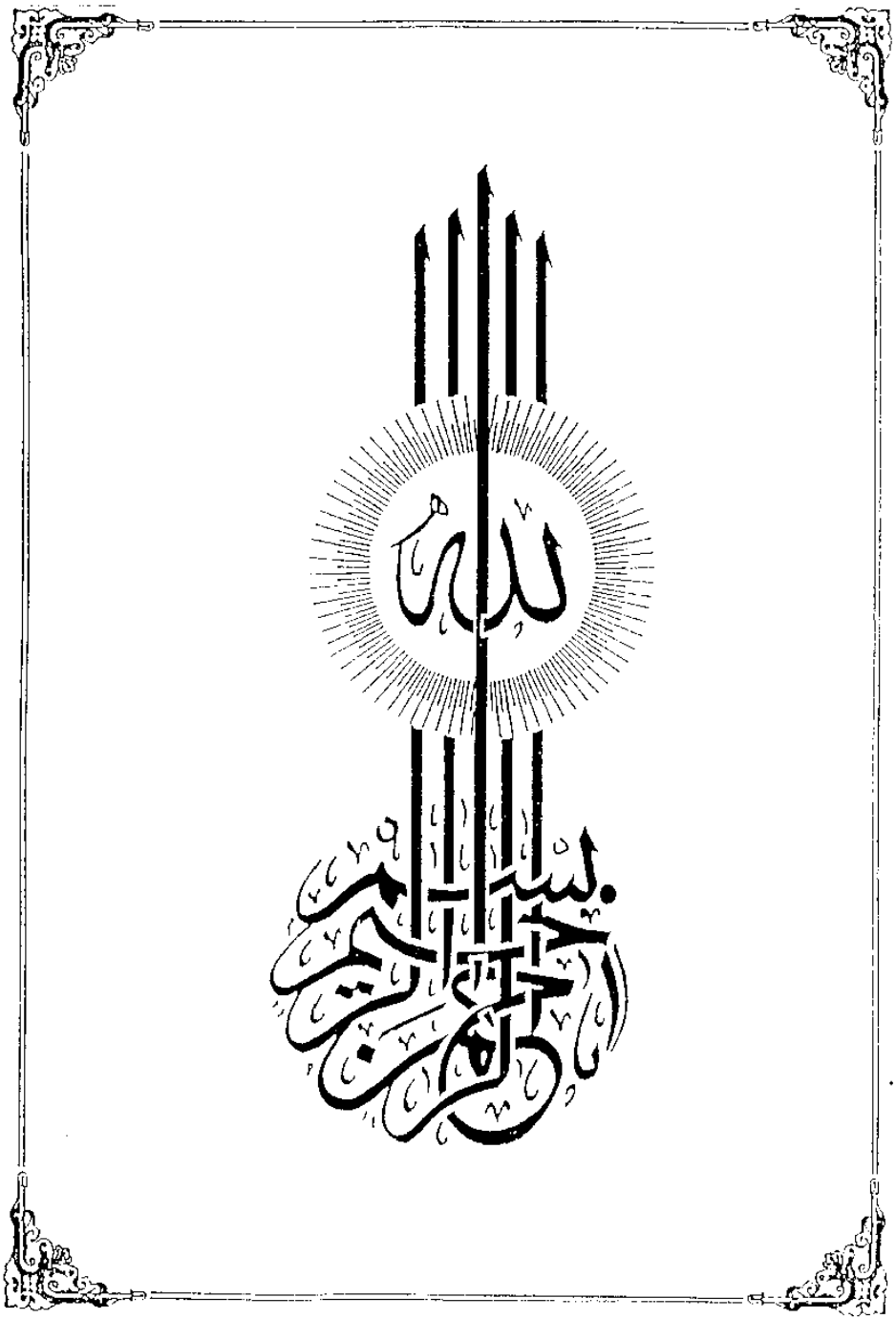
FACULTY OF MEDICINE
AIN SHAMS UNIVERSITY

1985

ACKNOWLEDGEMENT

I am really indebted to Prof. Dr. Mohamed Samir Abou Zeid, Professor of General Surgery, Faculty of Medicine, Ain Shams University for accepting the supervision of this essay and for his generous offer of his valuable advice, precious time and knowledge.

Also, I wish to extend my thanks to Dr. Alaa Abd-Allah, the Lecturer of Surgery, Faculty of Medicine, Ain Shams University, for his valubale assistance, encouragement and revision of this essay during its preparation.



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THE AIM OF THIS ESSAY IS TO STUDY THE DIFFERENT POINTS RELATED TO CARCINOMA OF THE STOMACH.

INTRODUTION

INTRODUCTION

Carcinoma of the stomach can be cured by gastrectomy, and only by this method the patient's life can be saved. All non surgical methods of treatment, including radiotherapy, and combination chemotherapy have a high mortality reaching 100 % . Early diagnosis and radical resection are improtant principles for curative surgical treatment.

Because fewer than 55 percent of cancers of the stomach lend themselves to "Curative" resection, it is obvious that no improvement in the present siutation is possible until these patients are referred to the surgeon at a much earlier period in the illness than they have been hitherto. After all, unless the diagnosis is made early, no technical skill will save the patient with carcinoma of the stomach.

It should be emphasized that lymph nodes involvement indicates a considerable poorer prognosis than can be expected if lymph nodes are not involved.

To the lay person a diagnosis of gastric cancer signifies impending death. There is also a wide spread belief among surgeons that carcinoma of the stomach is a hopelesscondition and that only in exeptional instances

it is amenable to surgical cure. This attitude of hopelessness is a great deterrent to progress. Cancer of the stomach is a curable disease, since the great improvement that have been made during the last decade, in the methods of diagnosis and surgical procedures. These rapid advances in the science and art of management of this disease provide hope and encouragement regarding future prospects.

At operation it is sometimes difficult to decide whether a large, fixed, infiltrating growth is resectable or not; and it is often difficult to decide and to choose the type of operation (total or subtotal gastrectomy). Thus in cases of carcinoma of the stomach, the challenge to surgical courage should always be accepted. Surely, the decision is one of the duties of strength.

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ANATOMY OF THE STOMACH

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The stomach is the most dilated part of the digestive tube. It is situated between the end of the oesophagus and the duodenum. It lies in the epigastric, umblical and hypochondriac region of the abdomen. It occupies a recess bounded by the upper abdominal viscera, in front, and on the left side by the anterior abdominal wall and the diaphragm. Its shape and position varies occording the changes within itself and the surrounding viscera. The c pacity of the stomach varies with age, it is 30 ccm at birth increasing gradually to about 1000 ccm. at puberty and commonly reaching to about 1500 ccm in adult. (Warwick et al.,1973).

The stomach consists of fundus, body,pyloric antrum, and pylorus. The fundus is the part hat projects upward in contact with the left dome of the diaphragm above the level of the cardiac orifice. It is usually full of gas. The body extends from the fundus to the level of the incisura angularis, a constant notch in the lower part of the lesser curvature. The pyloric antrum extends from this level narrowing gradually to the pylorus. The pylorus palpably thicker than the rest of the stomach wall and the pyloric canal is held closed by the tone of the

pyloric sphincter except when the sphincter relaxes to allow the stomach to expell a jet of its content to the duodenum. (Last, 1979).

The stomach has two openings, two curvatures and two surfaces.

The cardiac orifice , it is the opening that communicates the oesophagus with the stomach. It is situated on the left of the median plane, behind the seventh costal cartilage 2.5 cm from its junction with the sternum and at the level of the eleventh thoracic vertebra. It is placed 10 cm from the anterior abdominal wall and is 40 cm from the incissor teeth. The pyloric orifice is the opening into the duodenum. Its position is usually indicated by a circular groove on the surface of the stomach termed the pyloric constriction which indicates the position of pyloric sphincter. Also it can be identified by the prepyloric vein (Vein of Mayo). The vein runs vertically across its anterior surface. The pyloric orifice lies 1.2 cm to the right of the median plane near the level of the lower border of the first lumber vertebra (transpyloric plane) when the body is in the supine position and the somach is empty.

The lesser curvature, extending between the cardiac and pyloric orifices. If forms the right border

of the stomach. It descends as continuation of the right margin of the oesophagus in front of the decussating fibres of the right crus of the diaphragm. Then turning to the right, it curves below the omental tuberosity of the pancreas and ends at the pylorus. The most dependent part of the curve forms a notch, the angular notch (incisura-angularis) which varies in position with the state of distension. It serves to separate the stomach into right and left portion. The lesser curvature gives attachment to the lesser omentum. The two layers of the lesser omentum contains the right and left gastric vessels adjacent to the lesser curvature.

The greater curvature is directed mainly forward. It is four or five times as long as the lesser curvature. Starting from the cardiac orifice at the cardiac notch it forms an arch backwards, upwards and to the left. The highest point of the convexity (of the fundus) is on the level of the left fifth intercostal space and lies just below the left nipple like that of the diaphragm, varies with the phases of respiration. From this level it may be followed downwards and forwards, with a slight convexity to the left almost as low as the cartilage of the tenth rib, when the body is in the supine position, it then turns to the right to end at the pylorus. Directly opposite the angular notch of the lesser curvature, the

greater curvature presents a bulge which is the left extremity of the pyloric part of the stomach. This is limited on the right by a slight groove which indicates the subdivision of the pyloric part into a pyloric antrum and pyloric canal. The pyloric canal is 2 - 3 cm. in length and terminates at the pyloric constriction. At its begining, the greater curvature is covered by peritoneum, contineous with that on the front of the stomach. On the left side of the fundus and the adjoining part of the body, the greater curvature gives attachment to the two layers of the greater omentum separated from each other by gastrosplenic vessels. The gastrosplenic ligament and the greater omentum are directly contineously as they are both parts of the original dorsal mesentry of the stomach.

When the stomach is empty and its walls contracted, its surface are directed upwards and downwards respectively, but when it is distended they look forwards and downwards. Therefore they are described as anterosuperior and posteroinferior. Anterosuperior surface, the left part of this surface lies undercover of the left costal margin. It is in contact with diaphragm which separates it from the left pleura, the base of the left

lung, the pericardiusm, sixth, seventh, eighth and ninth ribs and intercostal spaces of the left side. It is also in relation to the upper fibres of origin of the transversus abdominis which intervenes between it and the seventh, eighth and ninth costal cartilages. The upper and left part of this surface becomes posterolateral and is in contact with the gastric surface of the spleen. The right half is in relation with left and quadrate lobes of the liver and with the anterior abdominal wall. When the stomach is empty, the transverse colon may lie on the front of a part of this surface. The whole surface is covered with peritoneum, and a part of the greater sac of the peritoneum intervenes between it and the above structures. The posteroinferior surface is related to the diaphragm, the left suprarenal tringular area in direct contact with the left crus of the diaphragm and sometimes with the left suprarenal gland. The left gastric vessels reach the lesser curvature of the stomach at the right extremity of this area (in the left gastropancreatic fold) and from its left side a short peritoneal fold termed the gastrophrenic ligament which is contineous below with the lienorenal and gastrosplenic ligaments pass to the inferior surface of the diaphragm. (Warwick et al.,1973).