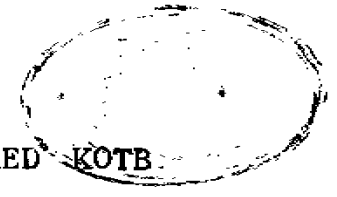
# ACUTE VARICEAL BLEEDING

**ESSAY**

Submitted for Partial Fulfilment
of the Master Degree in
( GENERAL SURGERY )



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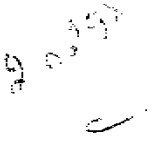

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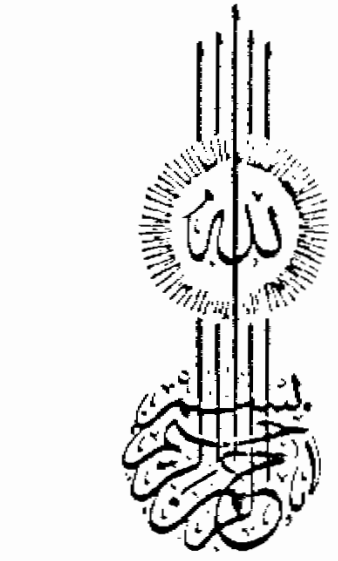

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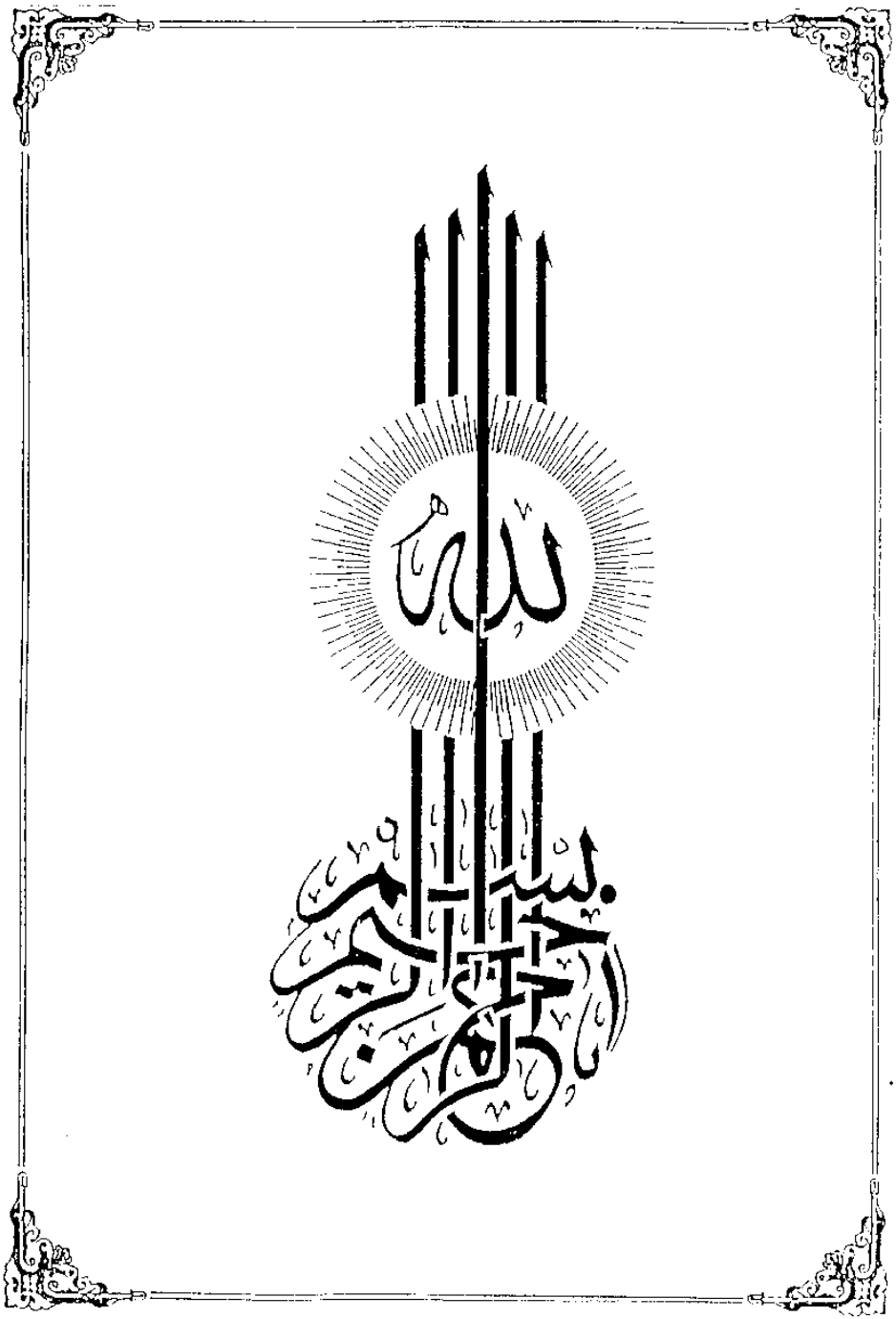

TO MY PARENTS

AND MY WIFE

ACKNOWLEDGEMENT

I would like very much to express my deepest appreciation and gratitude to Professor Dr. REFAAT KAMEL for his constant encouragement, ethical model, enthusiastic teaching, supervision and revision of this work.

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# INTRODUCTION

# INTRODUCTION AND AIM OF THE WORK

Acute variceal bleeding is a national problem. It is an important emergency that faces all the practicing doctors in Egypt. Hepatic schistosomiasis is the main underlying factor in the development of portal hypertension in Egypt.

The bleeding from gastro-oesophageal varices differs significantly from other causes of upper gastrointestinal bleeding. Their management is different and therefore an established emergency diagnosis is essential (Schwartz, 1979).

Variceal haemorrhage is still an unresolved critical event with lots of controversis.
They represent a big group of our admissions in all our hospitals in Egypt. There is a high mortality inspite of the various lines of treatment adopted.

The aim of this work is to discuss the various aspects related to acute variceal haemorrhage viz; aetiology, pathogenesis, pathology, haemodynamics and clinical aspects whether diagnostic, therapeutic or prognostic.

# ANATOMICAL REVIEW

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### ANATOMY OF THE PORTAL SYSTEM

The venous drainage of the intestine, pancrease, spleen is by the portal vein, the portal vein is formed by union of the splenic and superior mesenteric vein at the level of second lumbar behind the neck of the pancrease.

It runs for 8-9 cm to the hilium of the liver, where it divides into lobar branches.

The coronary vein usually enters the portal vein on its anteromedial aspect just cephaled to the margin of the pancrease. In 25% of cases, the coronary vein joins the splenic vein.

Other small venous tributeries from the pancrease and duodenum are less constant.

The inferior mesenteric vein generally drains into the splenic vein several centimeters to the left of the junction with the superior mesenteric vein, not uncommonly, it empties directly into the superior mesenteric vein.

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In cases of portal hypertension due to different causes, there is a collateral circulation between the portal system and systemic system.

(i) The most important communication Is at the lower end of the oesophagus and the cardia of the stomach. Where the veins of stomach draining to the portal communicate with the oesophageal veins to the azygos and vena cava.

(ii) Around the umbilicus: Veins pass along the falciform ligament to the umbilicus, connecting the veins of the liver draining to the portal system with the vein around the umbilicus namely epigastric veins which are systemic enlargement,of these may produce a bunch of veins radiating from the umbilicus, which is called caput medusae.

(iii) At the lower end of the rectum: Three arteries supply the rectum, and the accomping veins drain partly to the systemic and partly to the portal circulation The superior haemorrhoidal becomes the inferior mesenteric which is portal.

The middle and inferior haemorrhoidal veins empty into the hypogastric which is systemic.
In portal hypertension the veins of the rectum become dilated to form haemorrhoids, but this is rare.

(iv) At the back of the colon: In front of the kidney small vessels unite with the vessels of the peritoneum and colon draining to portal circulation with the vessels of the kidney draining into the systemic circulation.

(v) Bare area of the liver: Small vessels unite the diaphragmatic veins draining to the systemic circulation with the liver veins draining to the portal circulation.

Anatomy of oesophagogastric varices:

The oesophago-gastric varices are the most important, because of their great liability to produce haemorrhage which is the second main cause of death after hepatic coma in case of portal hypertension. (Kamel, 1965).

The classifications of oesophagogastric varices were stated by Butler, (1951) as follows:

1. Intrinsic system.
2. Extrinsic system.
3. Perforators or communicating venous system.

1. Intrinsic system:

Also classified into:

a) Subepithelial venous plexus:

This group of veins has thin walls and lies within the lamina propria of the oesophageal wall. They have no valves and drain directly into the submucous group.

b) Submucous venous plexus:

This group lies just above the cardia in the submucosa, the veins are free due to presence of loose connective tissue framework poorly supporting them. They are 10 to 15 longitudinal veins with numerous cross anastomosis, 3 or 4 of the submucous veins are in the form of trunks with saccular diltation.

2. Extrinsic system:

Subdivided by Butler, (1951) into 2 groups:

a) Extrinsic set proper:

The extrinsic venous drainage of the abdominal oesophagus is carried through 3-4 veins which join the left coronary vein where it deviates to the right to leave the lesser omentum. The short gastric veins