







شبكة المعلومـــات الجامعية التوثيق الالكتروني والميكروفيا.



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التوثيق الالكتروني والميكروفيلم



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ASSESSMENT OF HEPATIC, RENAL FUNCTIONS, AND PORTAL HEMODYNAMICS FOLLOWING ENDOSCOPIC VARICEAL LIGATION VERSUS ENDOSCOPIC INJECTION SCLEROTHERAPY

Thesis

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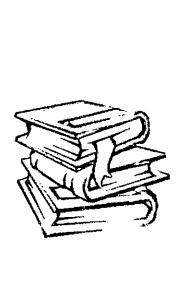
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NTRODUCTION



INTRODUCTION

Portal hypertension is the main complication of liver cirrhosis, and is the leading cause of death in affected patients. Mortality from the first episode of variceal bleeding in patients with cirrhosis ranges from 30-50% in most studies⁽¹⁾.

Portal hypertension is a **clinical syndrome** which is characterized by a pathological increase in portal venous pressure and by the formation of portosystemic collaterals that divert portal blood to systemic circulation by-passing the liver^(2,3).

Esophageal variceal haemorrhage is an acute, severe, dramatic complication of the patients with portal hypertension that carries a high mortality and significant incidence of recurrence. (4,5,6).

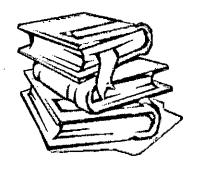
Baloon tamponade of the esophagus was considered the first line of treatment to control variceal haemorrhage. However management of this entity has changed during the last decade, mainly because of the results obtained with diagnostic and therapeutic endoscopy and emergency sclerotherapy⁽⁷⁾.

Endoscopic injection sclerotherapy is a well documented endoscopic method, highly effective in controlling esophageal variceal haemorrhage, however the procedure is technically complex and has procedure-related complications.

Recently, endoscopic variceal ligation has gained more popularity in the endoscopic treatment of esophageal variceal haemorrhage⁽⁸⁾.

Variceal ligation has been shown to be superior to injection sclerotherapy for the treatment of variceal bleeding, as patients with variceal ligation have fewer episodes of recurrent bleeding, fewer procedure - related complications and require fewer treatment sessions to obliterate varices. However the procedure also has many disadvantages^(9,10).

Hence, the aim of the present study is to compare the safety of endoscopic variceal sclerotherapy and variceal ligation in terms of hepatic, kidney functions as well as determining their effect on portal hemodynamics.



PEVIEW OF LITERATURE



REVIEW OF LITERATURE

Anatomy and physiology of portal venous system:

The portal vein collect blood from the splanchanic area which includes the abdominal portion of the digestive tube, pancreas, and the spleen then transport it to the liver. There are frequent variations in the anatomy of the branches of the portal venous system, but the portal vein itself begin at the level of second lumbar vertebra posterior to the head of pancreas by the **confluence of the superior mesentric and splenic veins.** From this point it pass behind the duodenum to enter the liver at the porta hepatis in two main branches. The right branch that supplies the right lobe and the left branch that supplies left, caudate and quadrate lobe. The portal vein is approximately from 6 to 8 cm long, 1.2 cm in diameter⁽¹¹⁾.

The ligamentum teres joins the left branch of the portal vein and contain within it one or more potential lumen "umbilical or para umbilical veins" that are reminants of the foetal circulation running from the umbilical to the left portal vein.

The splenic vein originates at the splenic hilum by the convergence of a number of splenic venous trunks and receives the short gastric veins near the tail of pancreas which drain blood from the left part of the greater curvature of the stomach. The splenic vein then courses in a transverse direction, behind the tail and body of the pancreas joining the superior mesenteric vein approximately at a right angle.

The superior mesenteric vein drains blood from the ilio colic, right colic, middle colic and small bowel veins and ascends anteriorly to the third portion of the duodenum to unite with the splenic vein.

The inferior mesenteric vein draining blood from the rectum and left region of the colon, usually enters the middle third of the splenic vein, although occasionally it runs into the junction of the superior mesenteric and splenic veins.

The left gastric vein courses in the lesser omentum from right to left along the lesser curvature of the stomach, near the cardia it reveses upon itself and enters the portal vein, usually at its origin⁽¹²⁻¹³⁾.