STUDIES OF DIFFERENT CAUSES AND MANAGEMENT OF OBSTRUCTIVE JAUNDICE

Essay Submitted in Partial Fulfilment of the Requirement for Master Degree in General Surgery

BY

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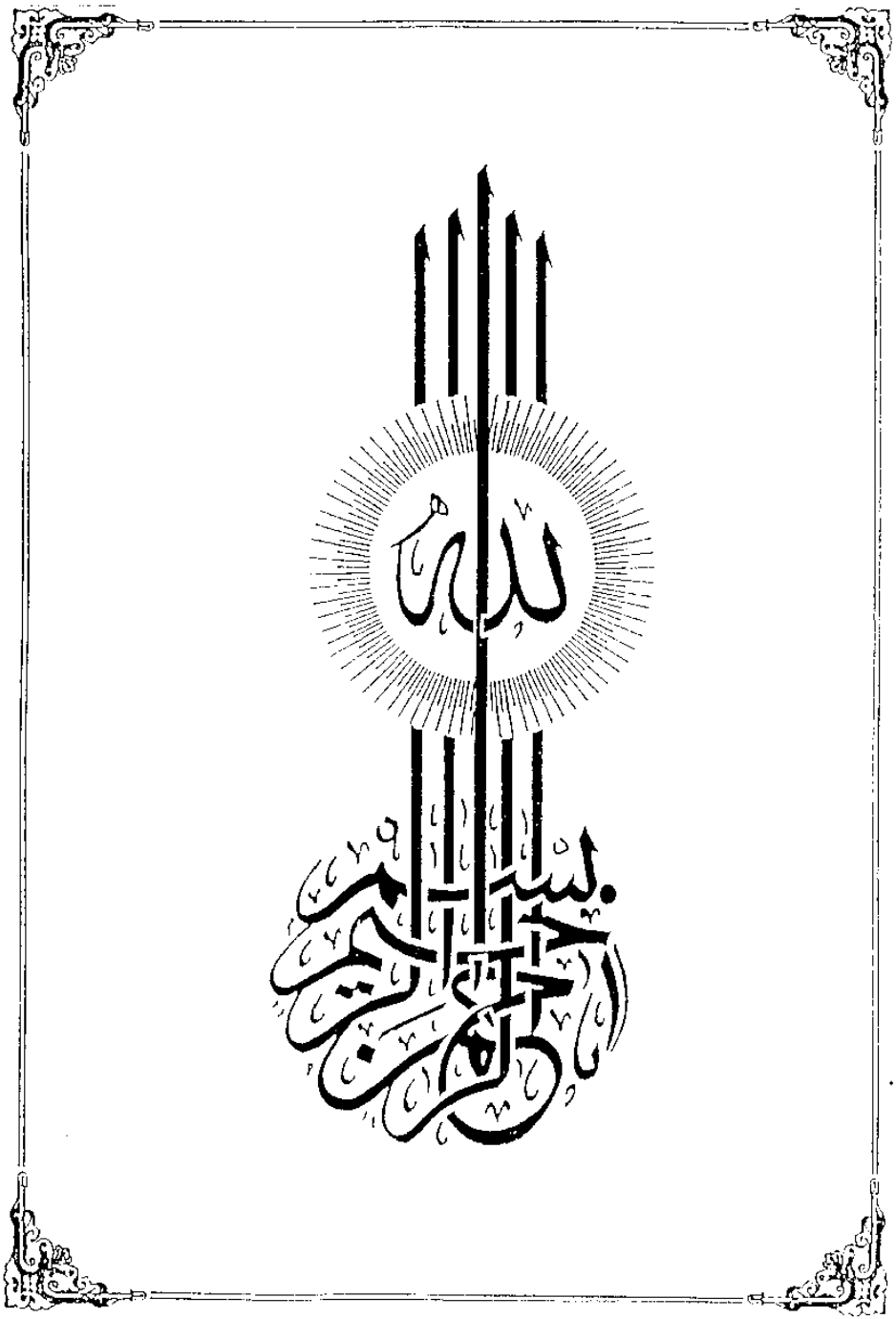
C O N T E N T S



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AIM OF THE WORK

The work aims at studying the different aetiological factors, pathology and pathogenesis and up to date methods of diagnosis and treatment in patients with obstructive jaundice.

INTRUDUCTION

INTRODUCTION

The classic textbook serves broad guide lines to classify jaundiced patients as surgical and non surgical, oftenly this simple categorization may be an extremely painstaking task.

In the past the only two factors which were necessary for diagnosing jaundice before laparotomy are Yellow skin and clinical suspicion of mechanical biliary obstruction. The simplicity of those days are gone. The evaluation of the advanced new tools of investigations mainly physical and radiological, has changed the situation from a matter of guess into an objective, mostly accurate way of solving the diagnostic problem.

It is not enough to diagnose patients with surgical jaundice accurately before laparotomy but through preoperative regimes are now well recognized and must be meticulously followed if a promising outlook is sought in the prognosis of patients treated surgically.

HISTORICAL REVIEW

Historical Review

Glisson described the anatomy and physiology of the distal common duct at 1681., he stated that " all returns into the ductus communis is prevented by annular fibers which block not only the opening itself but the whole slanting tract. Those same fibers block all passage, untill some more fluid again accumulates to force an opening".

Almost 300 years later the anatomical knowledge has not been greatly expanded.

Boyden at 1957 describe the mode of bile duct entetance into the duodenal wall and describe the anatomical divisions of the intraduodenal portion. The sphincter formed by superior sphincter of Boyden, inferior choledochal sphincter and the muscular fibers in between the superior and inferior sphincters (formed by muscular fibers surrounding the ducts) is called collectively submucosal sphincter of hoyden. (Boyden EA, 1957)

The crude anatomy of the congenital cystic dilatation of the common bile duct was first described by Vater in 1723, but Doglas was the first to give an accurate account of the symptomatology and pathological characteristics of this lesion.

In 1958, Carali et al enlarged the view of choledochal cysts by describing a case in which intrahepatic bile duct cysts occured in association with congenital hepatic fiberosis and distinguished this disease from polycystic disease of the liver.

Multiple choledochal cysts were first reported in 1964 by Arthur and stewart.

The first suggestion that surgical treatment might be effective in biliary atresia was made by Holmes in 1916. Kasai and Suzuki in 1959 described a new radical operation for non correctable atresia in Japanese, where they made anastomosis between the bowel and ductules containing bile which present in the porta hepatis and considered as remanants of the extrahepatic ducts.

Although Delbet is credited as being the frist to

describe sclerosing cholangitis in 1924, Eliot in 1918 in a comperhensive studies on biliary ductal strictures referes to a group of patients in whom strictures may develop without the history of cholecystectomy or any other operation, in these cases of primary strictures the symptoms include a gradually developing jaundice with or without occasional attacks of cholangitis during which the jaundice becomes more intense.

Cholangiography performed by percutaneous puncture of hepatic bile ducts was first described by Vietnamese and French physicians in 1937, then the use of flexible catheter was done. In 1974 professor Okuda from the university of chiba introduced the thin needle, this needle, is safer than previous needle and cholangiogram in 100% of patients with dilated ducts can be obtained.

More recently this procedure is used for biliary decompression prior to operative management or permenant treatment.

Cholecystostomy was first performed by John stough Bobbs in 1867.

Cholecystectomy performed for the first time by Langenbuch, in 1882.

Mc Burney performed the first sphincterotomy in 1891 to extract a common duct calculus, four years later Kocher opened the duodenum, incised the posterior wall of the duodenum and the anterior wall of the common duct 1 cm proximal to the papilla and removed a stone.

Sphincterotomy was first used to treat recurrent pancreatitis by Archibald and later employed extensively by Doubilet and Mullholland. (Doubilet H, Mulholland. JH., 1956).

Sphincteroplasty was developed in 1951 in an effort to improve upon the poor results that had been obtained with sphincterotomy in treating reccurrent pancreatitis. (Jones SA and Smith LL, 1952).

At 1958, sphincteroplasty with division of the septum in between the common bile duct and pancreatic duct was performed. At this time transduodenal sphincteroplasty considered to be by far the commonest approach

for residual common duct stones.

Choledochotomy was suggested for the first time by Lagenbuch in 1884, Kummel was the first to perform it in the same year. Thoronton was the first to perform it successfully in 1889. T-tubes have been used for a century ago and have become the standard method of Management after supra-duodenal choledochotomy primary closure of the common bile duct after exploration without a T-tube was first described by Halsted in 1887. He advocated that the bile duct should be sutured and if decompression was necessary the cystic duct stump could be used.

Radical treatment for carcinoma of pancreas was done by Halsted in 1899 where he resect a segment of the second part of the duodenum and a portion of the pancreas. Brunschwig at 1937 was the first surgeon to perform successfully an extensive radical pancreatoduodenctomy for carcinoma of the head of pancreas, Whipple in 1940 performed the first recorded one stage removal of the head of the pancreas and all of the duodenum.

Langenbuch, in 1884, first postulated that pathologic changes in the papilla of Vater could affect the sphincter of Oddi and lead to clinically recognizable disease, He named this "Sclerosing choledochoodditis". In 1888, Oddi measured resistance in the distal choledochus and demonstrated that jaundice could be due to spasm of the muscles composing the sphincter at this area. Meltzer, in 1917, showed that both jaundice and Biliary colic could be precipitated by spasm of the sphincter that had now assumed Oddi's name. Del Valle,in 1926 described" retractile or fibrotic odditis" as a benign inflammatory and fibrous process and in 1928 reported the successful treatment of several patients with this disorder, Strauss et al., 1933 described 29 cases of "chronic biliary stasis " caused by hypertrophy and inflammation of the ampulla of Vater. Mallet-Guy and associates, in 1945 suggested the use of radiographs in the diagnosis of disorders of the sphincter of Oddi. In 1957 the diagnostic value of IV cholangiography was defined by Cattell et al., Cattell and Colcock, Grage et al. and Acosta, in the early 1950's to mid 1960's

described the use of the various-sized probes to asses the patency and diagnosis of stenosis of the sphincter of Oddi. Vondrasek et al., in 1974, were the first to report endoscopic measurements of sphincter pressure ' Bar-Meir et al., in 1979, first described the endoscopic manometric findings in patients with suspected papillary stenosis and, in 1980, Geenen and his colleagues showed that exogenous enteric hormones had an effect on the motor activity of the sphincter of Oddi (Jeffrey B.Raskin, 1985).