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ERCP FOR PANCREATIC DISEASES – EXPERIENCE IN OUR TERTIARY CARE CENTRE

Gastroenterology

Dr.Sibithooran Karmegan	Madras medical college, Chennai
Dr.Malarvizhi Murugesan*	Madras medical college, Chennai *Corresponding Author
Dr.Kani sheikh mohammed	Madras medical college, Chennai
Dr.Ratnakar Kini	Madras medical college, Chennai
Dr.AR.Venkateshwaran	Madras medical college, Chennai
Dr.K.Premkumar	Madras medical college, Chennai
Dr.Thinakarmani	Madras medical college, Chennai
Dr.Mohammed noufal	Madras medical college, Chennai
Dr.Radhakrishnan	Madras medical college, Chennai
Dr.T.Rajkumar Solomon	Madras medical college, Chennai

KEYWORDS

INTRODUCTION:

ERCP was originally developed almost half a century ago as a diagnostic tool for pancreatico biliary disorder[1]. It has proved to be an effective procedure over the years of course with associated complications[2]. With the development of non invasive and minimally invasive diagnostic alternatives such as magnetic resonance cholangiopancreatography (MRCP) and endoscopic ultra sound, ERCP has evolved from primarily a diagnostic modality to almost an entirely therapeutic procedure.

Recurrent acute pancreatitis is a challenging condition because it leads to significant morbidity , patient is more prone to develop chronic pancreatitis and the management options are limited[3]. Endoscopic therapy in the form of papillary sphincterotomy with or without pancreatic ductal stenting is useful in cases of pancreatic divisum , idiopathic RAP or smoldering AP. Also in cases of acute pancreatitis complicated by fluid collections or fistulae endotherapy has a major role to play.

In chronic pancreatitis evidence that ductal hypertension can result in inflammation and pain justifies the ductal decompression for amelioration of pain. Decompression with endoscopic approach is currently recommended as the first line modality by european society of gastrointestinal endoscopy(ESGE)[4].

Our centre had been doing many pancreatic stenting endotherapies offlate for a variety of these indication .Aim of this study was to assess the success rates of PD stenting with respect to various indications.

STUDY POPULATION, MATERIALS AND METHODS :

The study was conducted in the institute of medical gastroenterology of the government general hospital at Chennai. ERCP done for all pancreatic diseases between august 2015 and july 2017(excluding biliary stenting for biliary pancreatitis) were included in the study. 83 patients met the study criteria.49 were males and 34 were females.

The indications for the endotherapy were noted. The outcomes were dichotomously categorized into success or failure based on the symptomatic improvement following the procedure , normalization of amylase and lipase values when applicable and repeat imaging after 6 weeks and whether patient needed surgical management or not.

STATISTICALANALYSIS :

The success rates with respect to individual indications of endotherapy were analysed using the logistic regression method and the results were obtained.

RESULTS :

21 for symptomatic pseudocyst, 32 for chronic calcific pancreatitis, 12 for PD fistula, 11 for panceas divisum and 7 for traumatic pancreatitis underwent endotherapy.

Symptomatic pancreatic pseudocysts:

In 21 patients with for whom pseudocysts was there endotherapy was attempted in the form of pancreatic stenting . In 6 (29%)patients nothing more was required . Where as in the other 15(71%) the stenting was not possible technically or patient required other forms of therapy in the form of percutaneous or endoscopic transmural drainage or surgery. The success of the procedure largely depended on the communication of the pancreatic duct with the cyst .

Symptomatic CCP with strictures and / or calculi :

In 32 patients PD stenting was attempted for chronic calcific pancreatitis with persistent symptoms and had significant strictures and / or calculi on imaging.9 patients did not require anything more(28%) . Rest of the 23 patients (72%) who had persistent symptoms following the procedure were suggested surgical management.

PD fistula with ascites or pleural effusion :

12 patients underwent PD stenting for this problem. 4(33%) of them responded very well. Other 8 did not(66%).

Recurrent acute pancreatitis or chronic pancreatitis with pancreatic divisum on MRCP :

11 patients were treated for pancreatic divisum with papillary

sphincterotomy and PD stenting.10 (91%) patients did not require anything more. This was statistically significant with a P value of 0.005.

Acute traumatic pancreatitis :

7 patients with partial PD injury after a blunt abdominal trauma who developed acute pancreatitis were taken up for PD stenting which was successfully accomplished in 6 (85%).This was statistically significant with a P value of 0.01.

DISCUSSION :

Pancreatic endotherapy is being increasingly used for treatment of variety of pancreatic disorders including chronic pancreatitis ,idiopathic recurrent acute pancreatitis , pancreatic duct leaks or disruptions, drainage of pseudocysts and the prevention of of pancreatitis following ERCP. Stenting of the minor papilla has been used in the treatment of symptomatic pancreas divisum secondary to a stenotic minor papilla (5).

Pancreas divisum is the most common congenital pancreatic anomaly occurring in approximately 7% of of subjects in autopsy series(6,7). More than 95% of patients with pancreatic divisum remain asymptomatic , even in those who are symptomatic its of debate whether its due to pancreas divisum perse. However dilatation of the dorsal pancreatic duct implies that there is a pathologic narrowing at the minor papilla and the patient might benefit from minor papilla sphincterotomy with or without stenting(8).Traditionally the management of divisum related pancreatitis was surgical, offlate its being managed by endotherapy & with endotherapy the results are almost similar.

Blunt or penetrating trauma can damage the pancreas , although these injuries are uncommon due to the retroperitoneal location of the gland (9,10). The diagnosis of traumatic pancreatitis is difficult and requires a high degree of suspicion. Trauma can range from a mild contusion to a severe crush injury or transaction of the gland ; the later usually occurs at at the point where gland crosses the spine. This injury can cause acute duct rupture and pancreatic ascites. Healing of pancreatic ductal injuries can lead to scarring and stricture of the main pancreatic ductwith resultant obstructive pancreatitis. Hence it becomes important to manage trauma to the PD effectively which can be done by a rather minimally invasive endotherapy in selected cases.

CONCLUSION :

ERCP is very effective in managing cases of pancreas divisum and traumatic pancreatitis.

In other cases careful selection of the patients for endotherapy is the major determinant of success.

In cases of pseudocysts communication with pancreatic duct is the factor which determines the outcome. In cases of chronic calcific pancreatitis strictures or calculi near the ampulla in head region are more likely to respond

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