

LETTER TO THE EDITOR

Therapeutic ERCP

ERCP has now evolved from a purely diagnostic modality to a powerful therapeutic tool. Therapeutic ERCP has now replaced many hazardous open surgical procedures¹. ERCP in relation to biliary tree is now well established and that of pancreas is on a threshold of promising future². As the acceptability towards therapeutic ERCP continues to increase globally, the number of patients in this field will also increase with time. The number of procedures performed each year in our country continues to increase.

In total 689 cases of therapeutic ERCP were performed from January 2003 to June 2007 (Table I).

Table I: Patients undergo ERCP

Disease	n	Success	Failure
Malignancies of the pancreas, gall bladder or bile duct	283	250	33
Bile duct stone	226	201	25
Roundworm in biliary tree	57	57	0
Chronic pancreatitis	49	40	9
Papillary stenosis	44	44	0
Complication following cholecystectomy	30	23	7

In 283 patients with obstructive jaundice due to malignancy of the pancreas, gall bladder or bile duct, stenting was attempted during ERCP and it was technically successful in 250 (88.3%) patients; in the remaining 33 (11.7%) cases it was not possible. Thirteen of them developed severe complications with mortality in 12 patients.

Out of 226 patients with stones in bile duct, endoscopic stone extraction during ERCP was successful in 201 (88.9%) cases. It failed in 25 (11.1%) patients, of them five developed complications, all were managed by surgery but one patient expired.

ERCP revealed roundworm in biliary tree in 57 patients, of them 10 patients had additional stones. Complete clearance of worm and stones were done in all patients. There was no complication.

Forty-nine patients with chronic pancreatitis offered endotherapy and it was technically and clinically successful in 40 (81.6%) patients. Rest of the patients was advised for surgery. There was no complication.

Forty-four patients with functional papillary stenosis were treated by sphincterotomy. All of them improved well.

Another 30 patients who developed complications following cholecystectomy were posted for therapeutic ERCP but it was technically possible to salvage 23 (76.7%) patients. Remaining 7 patients' required open surgery and one patient died of persistent infection.

Therapeutic ERCP has proven to be a successful and durable solution in the treatment of patients with various operable and inoperable conditions related to hepatobiliary and pancreatic system. In many studies the clinical outcome of therapeutic ERCP showed excellent results. So far we know, this is the first study to report the experience of surgeons on therapeutic ERCP in our country.

Malignancy of the pancreas, gall bladder or bile ducts is the most common cause of biliary obstruction. Surgery is the standard treatment but unfortunately only 20% are operable. Patients with malignancies of the biliary tree have a poor prognosis; obstruction to bile flow can lead to severe symptoms and ultimately to liver failure³. Stent placement is associated with lower procedure related mortality, complications and shorter hospital stay when compared with surgical procedures. A short-term follow-up result of stenting in the present study is comparable with other study⁴. Complication like cholangitis develops due to inadequate drainage, incorrect stent position, migration and early obstruction. Polydorou et al., reported cholangitis in 7% of their cases in 1991.

Since 1974 endoscopic management of bile duct stone has become the approach of choice, especially after cholecystectomy and in-patient with high surgical risk. The advantage of therapeutic ERCP over open surgery makes it predominant method of treating choledocholithiasis. Initially laparoscopic cholecystectomy increased the demand for endoscopic management of common bile duct stones. However, by mid 1990s laparoscopic surgeons challenged the role of therapeutic ERCP by exploring the common bile duct laparoscopically but it is still in its infancy and expertise is limited to a few centers⁵. The role of ERCP has returned to its status in the prelaparoscopic era⁶. Several series have shown that 85-90 % of common bile duct stones can be effectively removed by ERCP⁷.

Ascaris lumbricoides is a common human parasite. In areas where it is endemic, biliary complications are also common⁸. Diagnosis is mostly done by ultrasonography and most of the cases respond to conservative treatment. Those who did not respond to conservative treatment were managed by ERCP. Endoscopic success defined as complete worm extraction and resolution of symptoms⁹.

Pancreatic ductal hypertension is considered to be the major pathophysiologic mechanism for pain in chronic pancreatitis. ERCP provides the treatment options for conditions that would otherwise require major surgery¹⁰. It includes pancreatic sphincterotomy, dilation of stricture, extraction of calculi and deployment of endoprosthesis. In this series complete ductal clearance was achieved in a very few cases, in most of the cases sphincterotomy with or without stenting was done. Immediate clinical improvement occurred in most of the cases with no severe complications.

In papillary stenosis there is a backup of bile & pancreatic juices. This can cause pain, more prolonged obstruction may result in altered LFT even attack of pancreatitis. Papillary stenosis can be caused by passage of stones or scarring after sphincterotomy. It usually results in dilation of bile duct¹¹. Papillary stenosis requires the hole to enlarge by cutting¹². In our series result of papillotomy was satisfactory.

Bile duct injury during conventional cholecystectomy is reported to be 0.1 to 0.2% but injury during laparoscopic cholecystectomy is reported to be higher. Surgical options are limited especially in the acute phase. The morbidity is considerable and the mortality from any intervention may reach 8%. Endoscopic surgery including sphincterotomy and subsequent stone extraction if needed, with or without endoprosthesis placement, can lead to resolution of bile leaks and post-operative fistulas¹³.

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