



CLINICO-ETIOLOGIC PROFILE OF PATIENTS UNDERGOING ERCP FOR OBSTRUCTIVE JAUNDICE SECONDARY TO MALIGNANCY.

Gastroenterology

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ABSTRACT

Background: A study describing the ERCP profile of the patients undergoing the procedure for malignancy related obstructive jaundice.

Aim: To analyse the patients undergoing ERCP for malignant etiology of obstructive jaundice and characterise the outcomes.

Introduction: The etiology of obstructive jaundice can be delineated easily into malignancy vs benign etiology. Benign etiology is dominated by stone disease. Malignancy can be varying from periampullary carcinoma, carcinoma head of pancreas, duodenal tumours, cholangiocarcinoma and others. In this study we attempt to analyse the patient profile and outcomes undergoing the procedure at our centre.

Methods: A retrospective observational study, conducted in the Department of Digestive Health and Diseases, Kilpauk Medical College, from September 2018 to July 1st, 2019. All the patients undergoing ERCP for obstructive jaundice with probable malignant etiology diagnosed basing imaging and histopathology modes were included. The demographics and the procedure events were recorded after having obtained the informed consent.

Results: A total of 70 patients were included in the study. There was male predominance in the study with 48(74.2%) patients and females comprising 18(25.8%). A total of 10(14.2%) patients were below the age of 45yrs and 60(85.17%) were above 45 yrs. The predominant etiology for which patients underwent the procedure was cholangiocarcinoma(n= 34, 48.5%). Sixteen patients (22.8%) had periampullary growth, whereas 10(14.2%) had carcinoma head of pancreas, followed by 4 patients with carcinoma of the gall bladder. 24 (34.2%) patients needed a sphincterotomy, 42(60%) patients could be successfully cannulated. During cannulation 36(51%) could be cannulated with 3 or less attempts whereas rest needed >3. Amongst the cannulated patients a plastic stent was successfully placed. 18(25.7%) needed a dilator (SBDC) for successful deployment. A total of 14 patients developed complications of which 10(14.2%) patients developed bleeding during the procedure for which standard of care followed and 2 developed mild post ERCP pancreatitis which was duly managed.

Conclusion: Although ERCP has been established as standard of care for relieving jaundice with obstruction, technical difficulties pertaining to the growth location and access for the same restrict the outcomes in many cases. Hence the availability of other modes including palliative surgery could also be offered in such subset of patients.

KEYWORDS

ERCP, Obstructive Jaundice, cholangiocarcinoma .

INTRODUCTION:

The etiology of obstructive jaundice can be delineated easily into malignancy vs benign etiologic. Benign etiology is dominated by stone disease. Malignancy can be varying from periampullary carcinoma, carcinoma head of pancreas, duodenal tumours, cholangiocarcinoma and others¹. In this study we attempt to analyse the patient profile and outcomes undergoing the procedure at our centre.

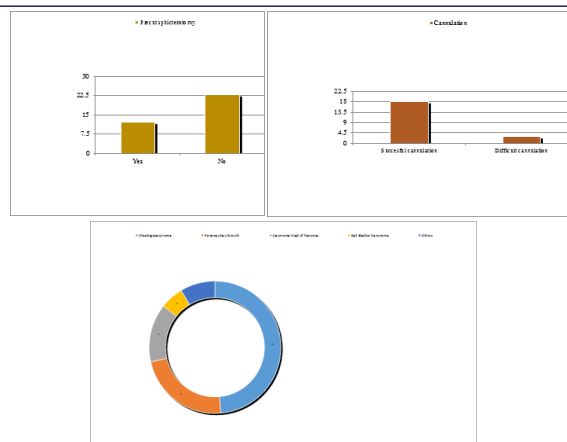
MATERIALS AND METHODS:

A retrospective observational study, conducted in the Department of Digestive Health and Diseases, Kilpauk Medical College, from September 2018 to July 1st, 2019. All the patients undergoing ERCP for obstructive jaundice with probable malignant etiology diagnosed basing imaging and histopathology modes were included. The demographics and the procedure events were recorded after having obtained the informed consent.

RESULTS:

A total of 70 patients were included in the study. There was male predominance in the study with 48(74.2%) patients and females comprising 18(25.8%). A total of 10(14.2%) patients were below the age of 45yrs and 60(85.17%) were above 45 yrs. The predominant etiology for which patients underwent the procedure was cholangiocarcinoma(n= 34, 48.5%). Sixteen patients (22.8%) had periampullary growth, whereas 10(14.2%) had carcinoma head of pancreas, followed by 4 patients with carcinoma of the gall bladder. 24 (34.2%) patients needed a sphincterotomy, 42(60%) patients could be successfully cannulated.

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DISCUSSION:

Since the advent of ERCP, the modality though initially used for diagnosis of biliary tract disorders it has been subsequently been used to relieve jaundice in patients with whom the outflow is compromised. Benign indications are usually secondary to stones or strictures (post surgery), can be successfully managed by ERCP alone². However causes secondary to malignant disorders are difficult to manage by the single modality alone, which may require a combination of PTBD and/or surgery. Through this study we attempted to analyse patients who underwent ERCP for malignancy related pathologies in our tertiary care centre and describe the technical success associated with it.

Pancreatic cancer has got various modalities of presentation with obstructive jaundice being as one of them. The prevalence varies across geographical diversities and might be relatively more common in southern India³. In these subset of patients jaundice might prevent a successful neo adjuvant or adjuvant chemotherapy or a palliative procedure. Transpapillary stenting has proven to be an appropriate

physiological reduction in bilirubin levels. The choice of the stent maybe a metal one or a plastic one , covered or and uncovered depending on the patient's clinical profile. ERCP also provides a significant symptom relief with respect to jaundice and pruritus in patients with very high bilirubin levels⁵. In our study most of the patients underwent a plastic stenting owing to financial constraints.

Cholangiocarcinoma though being uncommon in South India, our centre being a tertiary referral centre manages significant number of patients. 70% of our patients who had cholangiocarcinoma had a hilar cholangiocarcinoma. Bismuth classification is used to describe the extent and also is helpful in planning surgical intervention⁶. Accurate knowledge of tumour extent and anatomy is mandatory in operating a tissue diagnosis as well as planning the best therapeutic option. Though ERCP had been historically used in diagnosis of cholangiocarcinoma currently it has been replaced by MRCP. In our study all the patients had a prior MRCP and a CA-19.9 value fitting the diagnosis. Anatomical and technical challenges might influence the procedure time and a need for dilation⁷. In seven of our patients who required dilation successful dilation was achieved using a Sohendra biliary dilator system. Five of our patients had bilateral stents placed for adequate drainage. In none of the patients contrast was injected to avoid the risk of cholangitis.

Neoplasms of the ampulla of Vater although account only 0.5% of all GI malignancies, they pose a significant technical challenge in achieving a successful cannulation⁸. In appropriate patients ampullectomy may be deemed to be a therapeutic choice, our patients had stage 4 disease with liver metastasis. We could achieve a successful cannulation in only two patients with ampullary carcinoma.

Though ERCP has been fairly standardised over the time, even in hands of experienced endoscopists 5 to 10% cases fail with standard calculation methods⁸. In such sub groups pre-cut sphincterotomy is a reliable salvage for difficult biliary cannulation as defined by more than three attempts. In 24 of our patients this technique was used and procedure was salvaged. This procedure also carries undue risk of pancreatitis in inexperienced hands. Only two of our patients had mild post ERCP pancreatitis.

CONCLUSION:

Although ERCP has been established as standard of care for relieving jaundice with obstruction, technical difficulties pertaining to the growth location and access for the same restrict the outcomes in many cases. Hence the availability of other modes including palliative surgery could also be offered in such subset of patients.

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