

Exploring endoscopic procedure complications: Insights in esophagus, liver, pancreas, and biliary tract.

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Introduction

A tube is surgically placed in the proximal jejunum lumen during a jejunostomy, which is primarily done to deliver feed. Longitudinal witzel, transverse witzel, open gastrojejunostomy, needle catheter method, percutaneous endoscopy, and laparoscopy are only a few of the techniques used for jejunostomy. The main use for a jejunostomy is as an additional procedure during major upper digestive tract surgery, where nutrition can be infused at the level of the jejunum regardless of the pathology or surgical procedures of the oesophagus, stomach, duodenum, pancreas, liver, and biliary tracts. Additionally, it is utilised in laparotomy patients who are anticipated to have a difficult postoperative recovery, those who have a protracted fasting period, those who are hypercatabolic, or those who will subsequently require radiotherapy or chemotherapy [1].

Tube dislocation, obstruction or migration of the tube, cutaneous or intraabdominal abscesses, enterocutaneous fistulas, pneumatosis, occlusion, and intestinal ischemia are among the mild to severe consequences. Aspiration pneumonia and food contamination are the infectious side effects. Diarrhoea, which can range from 2.3% to 6.8%, abdominal distension, colic, constipation, nausea, and vomiting are the gastrointestinal problems. Hyperglycemia (29%), hypokalemia (50%), an electrolyte and water imbalance, hypophosphatemia, and hypomagnesemia are the metabolic consequences. These consequences are a result of poor nutritional selection in light of the patient's features, poor combination management, and poor clinical care. The best jejunostomy approach depends on both the surgeon's experience and the available material resources. Jejunostomy advantages outweigh the hazards [2].

In the event that endoscopic retrograde cholangio-pancreatography is unsuccessful, the bile duct is surgically or percutaneously emptied. The development of Endoscopic UltraSonography (EUS) has made it possible to see and empty the biliary tree. The purpose of this study was to evaluate Extra Hepatic (EH) and Intra Hepatic (IH) procedures, as well as benign and malignant causes, and review several methods of EUS-guided bile duct access and draining [3].

Hemobilia is one of the more uncommon arterioportal fistula consequences, making for about 3% of all serious percutaneous liver biopsy problems. We describe a patient who developed

hemobilia, acute pancreatitis, acute cholecystitis, and several stomach ulcers over the course of 11 days following an ultrasound-guided percutaneous liver biopsy. After consulting with medical professionals, digital subtraction angiography was performed, and it clearly demonstrated the right liver's arteriovenous fistula. Spring orbs were used to choose and embolise the hepatic artery. Following hepatic artery embolisation, the aggressive bleeding was stopped. After the embolisation, the patient was sent home on day 12 and continued to do well [4].

As with any endoscopic procedure, EUS and its guided interventions may be accompanied by adverse events. EUS related complications are generally infrequent in expert hands, and mainly include bleeding and perforation. However, the nature and severity of adverse events associated with each EUS guided procedure are unique. Hence, it is paramount for endosonographer to have sufficient knowledge of the indications, techniques, and potential risks involved before contemplating any given procedure [5].

Conclusion

Most common intervention with EUS is transmural Fine Needle Aspiration (FNA), which is an extremely safe procedure. EUS guided drainage procedures are rapidly evolving with newer devices and methods being employed. Among them, EUS guided drainage of pancreatic fluid collection-pseudocyst or Walled Off Necrosis (WON), has largely replaced other methods (surgical, percutaneous or non-EUS endoscopic) with acceptable complications. Currently, dedicated metal stents are more widely used compared to plastic stents for drainage of PFC, especially WON. EUS has made a definite impact in biliary access and drainage of obstructed biliary system, in patients where ERCP has failed or is technically not possible, closely competing with percutaneous biliary drainage. In spite of some complications, recent improvement in devices for bilio-enteric fistula creation and stent designs, has added to its safety and efficacy. EUS guided pancreatic duct drainage remains the most challenging of EUS guided interventions where in-roads are being made.

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