Case Report

**Extra Intestinal Biliary Stent Migration:**

**A rare case**

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Endoscopic retrograde Cholangiopancreatography (ERCP) and biliary stenting is one of the common procedure done for Choledocholithiasis. Stent migration outside the bowel in a case of ERCP is rare. Its presentation as Umbilical sepsis is even rarer. We are presenting a case of ERCP with extra intestinal biliary stent migration presenting with umbilical sepsis.

**Keywords:** Extra intestinal biliary stent, biliary stent migration.

**Introduction**

Endoscopic retrograde Cholangiopancreatography (ERCP) and biliary stenting is the safe and minimally invasive procedure for the treatment of Choledocholithiasis, but on rare occasion, these stents may migrate from the biliary tract and perforate the bowel and migrate outside the bowel. Such patient may present as generalized peritonitis or localized abscess, which requires surgical intervention. Less than 1% of these migrated biliary stents can cause intestinal perforation.

**Case report**

A 45-year female presented to us with swelling and pain at umbilical area for 1 month with high grade fever for 10 days. Pain was continuous and increasing in intensity. She had ERCP and biliary stenting done for Choledocholithiasis 3 years ago, this was followed by laparoscopic cholecystectomy. There was no history of biliary stent removal after laparoscopic cholecystectomy. On clinical examination, patient was icteric and pyrexial. Her abdominal examination showed a tender swelling at umbilical region with pus discharge (Figure-1). Her TLC was 12,000/cumm and total bilirubin was 1.8mg/dl with a creatinine of 1.7mg/dl. An erect x-ray abdomen showed a radiopaque tube (extra intestinal migrated biliary stent) lying from right iliac fossa to umbilicus (Figure 2).

On exploration pus was present at umbilicus. Omentum was adhered with anterior abdominal wall at umbilicus and one straight biliary stent was present lying under the umbilicus outside the bowel (Figure-3 & 4). Dense adhesions were present in right paracolic gutter. Stent was removed and lavage was done. There was no fistula/ perforation found in...
complications of ERCP are duodenal perforation, bleeding and pancreatitis. Distal stent migration occurs in 5-10% of cases. Incidence of intestinal perforation following ERCP is less than 1% and extra intestinal biliary stent migration is even rarer. In majority migratory biliary stent is found proximal to ligament of Treitz however there are reports of intestinal perforation and biliary stent migration distal to ligament of Treitz, generally in the colon. Use of straight biliary stent has increased chances of causing perforation of bowel and stent migration. Perforation with double pigtail biliary stent is rare.

Biliary stent migration can present as diffuse peritonitis, intra peritoneal abscess and bowel perforation. Migrated biliary stent can be retrieved by either endoscopically or at laparotomy. In case of gross contamination, intraperitoneal abscess and bowel perforation, emergency laparotomy is required. There are reports of percutaneous intervention in cases of retroperitoneal bilioma when it is not grossly contaminated to cause abscess.

Conclusion
Following ERCP, this is one of the rarest complication of biliary stent migration outside the bowel. Double pigtail biliary stent is preferable over straight biliary stent for the management of Cholelithiasis by ERCP. Laparotomy is required to retrieve the extra intestinal migrated biliary stent with gross contamination, intraperitoneal abscess and bowel perforation.

References


