

Introduction

ERCP with biliary stenting is the main modality of biliary decompression in cases of malignant biliary obstruction.

We describe an uncommon complication, in a case of locally advanced pancreatic ductal adenocarcinoma (PDAC).

Case Presentation

78-year-old female with obstructive jaundice, found to have a 2.5 x 3.4 cm soft tissue mass on MRCP with severe distal common bile duct (CBD) stenosis. EUS with fine needle biopsy confirmed the presence of PDAC with duodenal invasion/stenosis and portal vein encasement.

Same session ERCP was performed and a fully covered 10 mm x 60 mm self-expandable metal stent (SEMS) was placed across the stricture (figure A,B).

Neoadjuvant chemotherapy with Folfirinox was initiated.

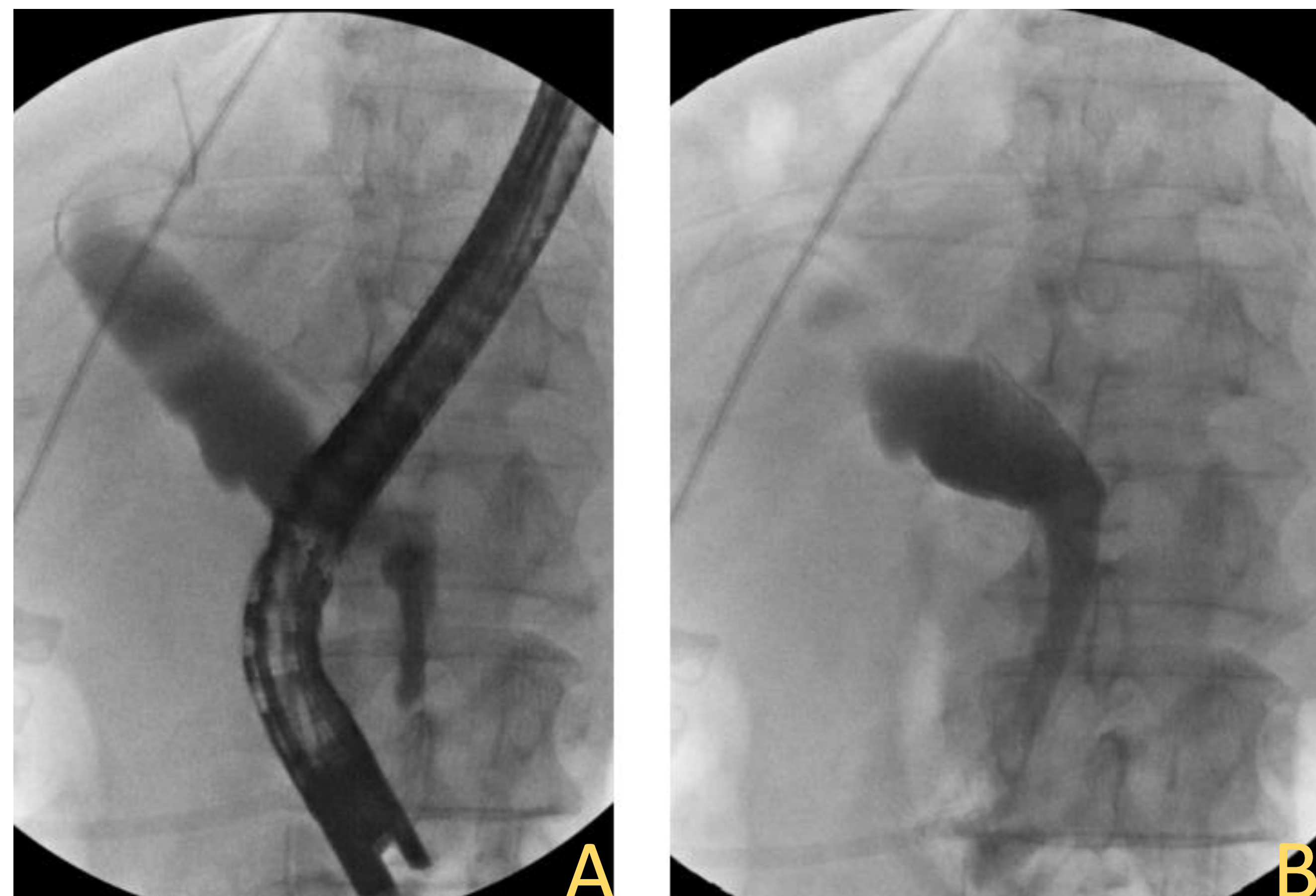


Figure A, B ERCP with covered SEMS placement.

Case Timeline

- ▶ Two weeks after covered SEMS placement, patient developed acute cholecystitis due to cystic duct occlusion.
- ▶ Repeat ERCP performed with removal of covered SEMS and replacement with an uncovered SEMS.
- ▶ LFTs normalized, cholecystitis resolved, and chemotherapy was completed.

- ▶ Two months later, jaundice recurred.
- ▶ Repeat ERCP revealed that the previous stent migrated proximally and could not be reached.
- ▶ A new uncovered SEMS was placed with excellent response (figure C).

- ▶ Six weeks later, elevated LFTs detected.
- ▶ Repeat ERCP revealed tumor ingrowth into SEMS.
- ▶ Plastic stent is placed through metal stent.

- ▶ 5 weeks later, restaging CT Abdomen revealed a patent CBD stent, and surprisingly migration of the first uncovered SEMS into the portal vein (figure D).
- ▶ Tumor was deemed resectable at this time.

- ▶ Patient underwent a successful Whipple surgery.
- ▶ Portal vein stent was left in place.
- ▶ Patient has done clinically well for one year post operatively without signs of recurrence.



Figure C, ERCP revealing proximal stent migration.

Figure D, CT Abdomen revealing old metal stent in portal vein and newer metal stent in CBD through which a plastic stent was placed due to tumor ingrowth.

Discussion

We describe the migration of an uncovered biliary stent from the CBD into the portal vein in a patient with PDAC with duodenal and portal vein invasion after chemotherapy.

To our knowledge, this has not been previously described in literature and is an unreported complication of ERCP.

A putative explanation is that progressive uncovered SEMS migration occurred after tumor shrinkage in response to chemotherapy and embedded in the adjacent portal vein which was completely encased by tumor.