Case-based Discussion 2
The Potential of Metal Stents in Biliopancreatic Stricture

Biliary Stricture following Blunt Abdominal Trauma

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Age and Gender: 58/female

Chief Complains: Jaundice after automobile accident

Present Illness: This patient was referred from outside hospital because she presented with jaundice 1 month after an automobile accident. Her epigastric area was injured by the impact with the steering wheel. She had been treated for hemoperitoneum and liver laceration conservatively at outside hospital.

Past History: Unremarkable

Family History: Unremarkable

Physical Examination and Laboratory Findings:

Physical Examination: Unremarkable

Laboratory Findings:
CBC: WBC 4,000/μL (neutrophil 55%), Hb 13.5 g/dL, Platelet 227,000/μL.
LFT: AST 217 IU/L, ALT 104 IU/L, total bilirubin 12.5 mg/dl, ALP 471 IU/L, r-GT 780 IU/L, CRP 1.74 mg/dl
CA19-9 12.9 U/ml
Prothrombin time (INR) 0.93

Endoscopic and Radiologic Findings:
The initial abdominal CT immediately after abdominal trauma demonstrated liver laceration, perihepatic fluid collection without evidence of intra- or extrahepatic bile duct dilatation. On the CT findings at the onset of jaundice (1 month after accident), intra- and extrahepatic bile duct dilatation with abrupt narrowing of the common bile duct (CBD) was noted.

Hospital Progress:
ERCP demonstrated stricture of suprapancreatic portion of the CBD with upstream bile duct dilatation. Brush cytology was negative for malignancy. After biliary sphincterotomy and the guidewire placement, a plastic stent...
(Amsterdam type 7Fr, 7cm) was inserted. Follow-up ERCP after 2 months showed no improvement of suprapancreatic biliary stricture so the upsized plastic stent (10Fr, 7cm) was placed into CBD. But suprapancreatic biliary stricture was not resolved on follow-up ERCP after 3 months. Fully covered metal stent was placed three times thereafter and the duration of each stent placement was 4-6 months. In spite of multiple times of metal stent placement, suprapancreatic biliary stricture was only partially improved and recurrent CBD stone has developed. We recommend surgical treatment to the patient and hepaticojejunostomy was performed finally. She is uneventful until now for 2 years since the surgery.