

Percutaneous hepaticojejunostomy

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Case report

A 61 year old man with pancreatic cancer had a bile leak after a Whipple procedure. Perihepatic biloma drain output was 260 ml/day. A right posterior biliary drain was placed, but this showed an intact bilioenteric anastomosis, with no bile leak. A right anterior biliary drain was then placed, which showed a bile leak from the left hepatic duct, which appeared to be completely disconnected from bowel. The right anterior duct joined the left hepatic duct, which drained into the perihepatic biloma (Figure 1).

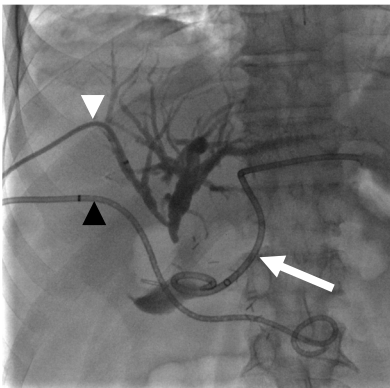


Figure 1. Right anterior biliary drain (white arrowhead) shows a bile leak into the perihepatic biloma drain (white arrow). The right posterior biliary drain (black arrowhead) goes across an intact bilioenteric anastomosis.

At this point, the biloma cavity was collapsed, and the disconnected left hepatic duct was near the afferent limb. The right anterior biliary drain was exchanged for a 6 F sheath, which was advanced through the perihepatic biloma, and the tip of the sheath was pressed into the fixed loop of jejunum (Figure 2). The position of the sheath was confirmed on CT. The back end of a Bentson wire was used to puncture into the jejunum. An internal/external biliary drain was placed across the new hepaticojejunostomy tract. The hepaticojejunostomy tract was later balloon dilated to 8 mm, then 10 mm. 6 months after creating the percutaneous hepaticojejunostomy, the 12 F internal / external biliary drain was converted to an external biliary drain for a 2 week capping trial prior to removal (Figure 3). One year after drain removal, patient was doing well clinically, with normal bilirubin.

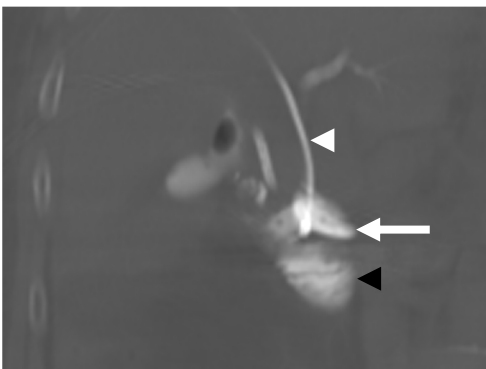


Figure 2. From the right anterior biliary drain access, a sheath (white arrowhead) was advanced through the biloma (white arrow), with the tip of the sheath next to jejunum (black arrowhead).



Figure 3. Mature hepaticojejunostomy tract, after balloon dilation and 6 months of internal / external biliary drainage.

Disconnected bile ducts after surgery can be reconnected to stomach or jejunum, from a percutaneous or endoscopic approach. Typically, a covered stent is placed. This case shows that a hepaticojejunostomy tract can be created without a stent or permanent tube.