Clinical summary

- Female 37 year-old with history of choledochoenterostomy many years ago

- Presents with biliary obstruction and cholangitis. MRI showed dilatation of common bile duct (CBD) with choledochal cyst and biliary calculi

- Percutaneous transhepatic biliary drainage of both left and right hepatic ducts was performed followed by a percutaneous transhepatic cholangiogram (PTC) which showed filling defects in duodenum, suspicious for tumour

- For PET/CT scan to exclude malignant change
PET/CT findings

PET scan showed two suspicious FDG-avid foci:

A. Linear activity adjacent to the tube drain.

B. Lesion at the inferior aspect of segment V of the liver near the surgical anastomosis.

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Surgical findings and discussion

- **Tumour found at choledocho-duodenostomy** site (B) – confirmed to be adenocarcinoma on frozen section.

- No tumour found elsewhere. The FDG activity adjacent to the PTC drain (A) was most likely due to local inflammatory changes.

- Decision was made to proceed with Whipple’s in view of negative FDG PET/CT for distant metastases.
Teaching points

• FDG uptake in the vicinity of a biliary drain tube is often due to inflammatory changes.

• This is an unusual presentation of cholangiocarcinoma at the site of prior surgical anastomosis for non-malignant biliary disease.

• The pre-operative PET/CT was helpful in guiding the surgical exploration as well as in N- and M-staging.