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## Commentary

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In the preceding paper 'Computed tomography with intravenous cholangiography contrast: a method for visualizing choledochal cysts', Höglund et al. report a patient in whom a choledochal cyst was diagnosed by CT with intravenous cholangiography, but in whom sonography and E.R.C.P. failed to provide convincing evidence for the diagnosis [1].

In the period covering 1973 to 1989 we have seen six patients with a cyst of the common bile duct (CBD). In all cases the cyst was demonstrated conclusively by E.R.C.P. There is often an anomalous union of the CBD with the pancreatic duct (Fig. 1), which may have diagnostic consequences [2,3]. The distal portion of the CBD is usually narrowed. It is likely that this anomaly was present in their patient, despite the failure to

canulate the CBD at E.R.C.P. The CBD was partially visualized, but the distal part could not be seen. In Fig. 3 of Höglund's paper, the right renal pyelocalical system can be seen. Renal contrast excretion during E.R.C.P. occurs when contrast medium extravasates into the parenchyma of the pancreas and subsequently reaches the blood circulation. The contrast medium refluxes into the CBD after either high pressure or repeated injections into the pancreatic duct. During continuous fluoroscopy this phenomenon may be visualized. Even if the distal part of the CBD is not immediately visible in such a patient, it can often be demonstrated by changing the position of the patient, e.g., from the supine to the prone position [4].

Gallstones are often found in patients with

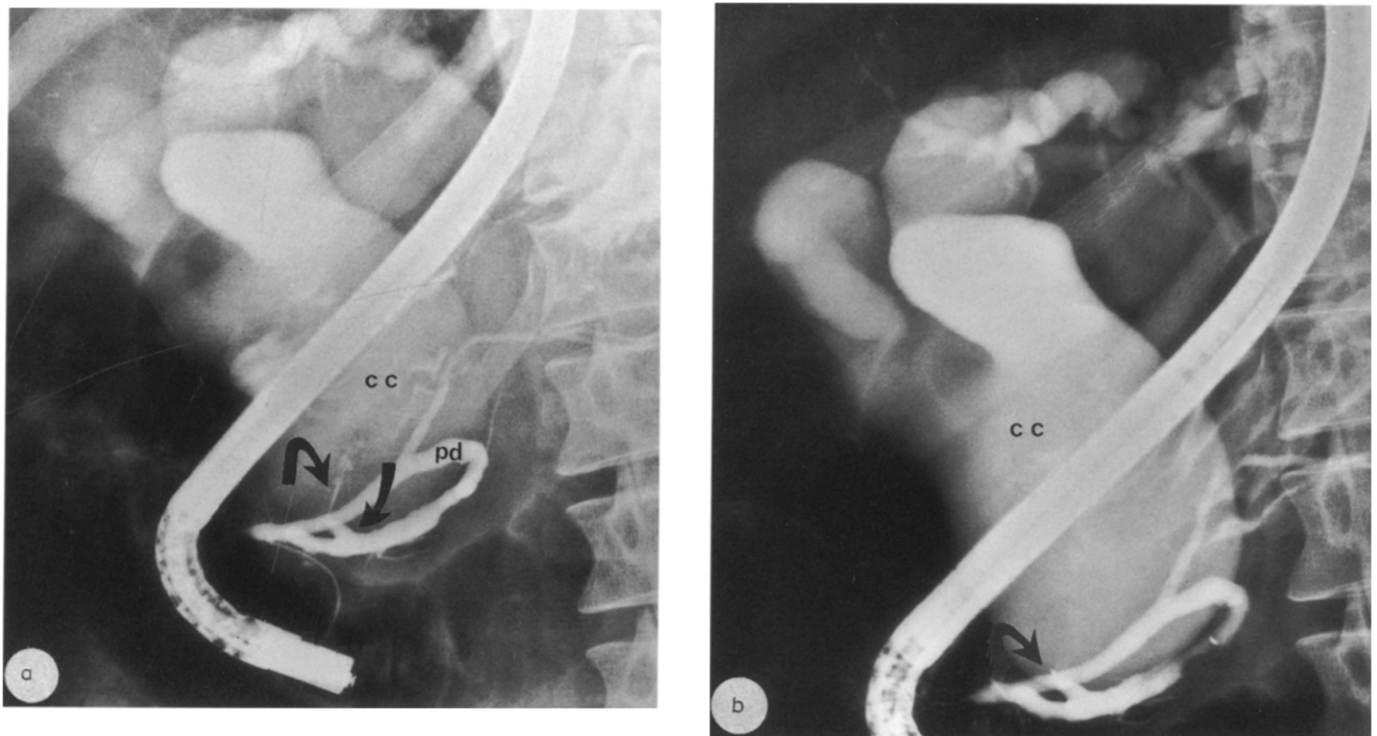


Fig. 1. (a) Large choledochal cyst (cc). Anomalous union (arrow) of the CBD with the pancreatic duct (pd). The contrast medium reaches the bile duct by reflux from the pancreatic duct. (b) The borders of the choledochal cyst are visible. The intrahepatic bile ducts are moderately dilated. The gallbladder is not visible.

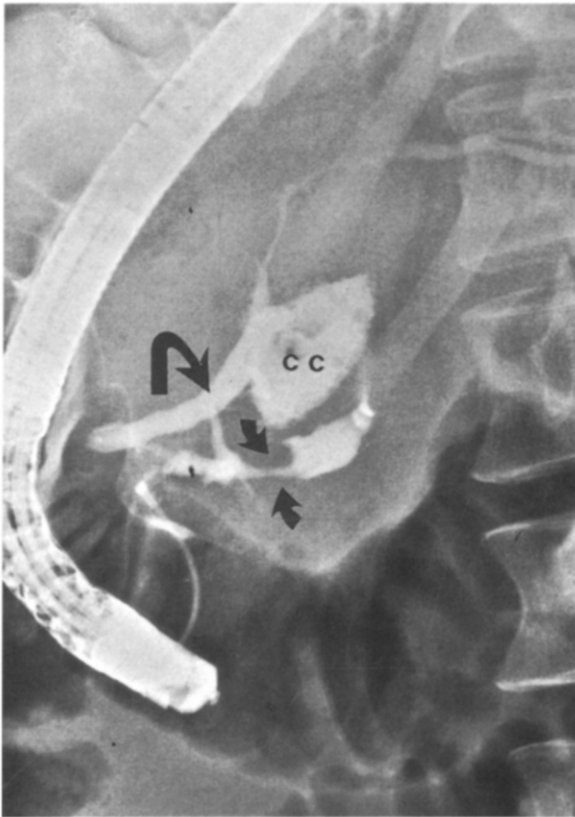


Fig. 2. Seven years after partial resection of the choledochal cyst and biliodigestive anastomoses. The intrapancreatic portion of the CBD cyst shows irregular contours at the lateral side. There is a malignant pancreatic duct stenosis (double arrows) adjacent to the junction of the CBD (arrow) with the pancreatic duct. The distal portion of the CBD is saw-toothed, and shows irregular contours and has a malignant appearance. The residual cyst (cc) shows polypoid intraluminal structures which were histologically proven to be a malignant degeneration.

choledochal cysts [5] and there is a very high incidence of biliary cancer, even after partial resection of the cyst [6] (Fig. 2). Choledochocystojejunostomy is therefore not an adequate treatment, because it does not remove the risk of malignancy. Total resection of the choledochal cyst, therefore, is the treatment of choice.

Sonography can reveal a dilatation of the CBD, but a well-performed E.R.C.P. will be conclusive. The diagnostic advantages of CT with intravenous cholangiography over E.R.C.P. has not been demonstrated convincingly in this case report.

## References

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