

Surgical Education and Self-assessment Program (SESAP)

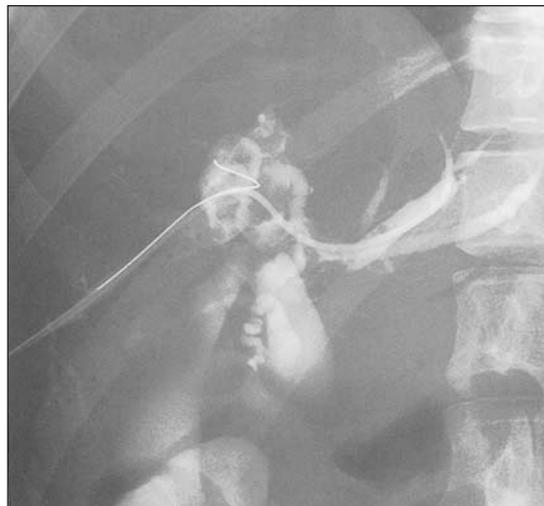
Category 4, Item 13

Question

A 28-year-old Asian woman has fever, jaundice and upper abdominal pain. Ultrasonography shows a normal gallbladder with dilated intrahepatic ducts. The percutaneous transhepatic cholangiogram shown is obtained.

The most likely diagnosis is

- A cholangiocarcinoma
- B recurrent pyogenic cholangitis
- C sclerosing cholangitis
- D hepatocellular carcinoma
- E choledochal cyst



Critique

The cholangiogram shows dilated intrahepatic ducts with intraluminal defects. This is suggestive of recurrent pyogenic cholangitis, a disease characterized clinically by recurrent bouts of fever, right-upper-quadrant pain, and jaundice, and radiographically by biliary-tree dilation due to stones and strictures. Parasitic infestations (*Clonorchis sinensis*, *Ascaris lumbricoides*) and malnutrition have been implicated as etiologic factors.

Cholangiography of Klatskin's tumour, cholangiocarcinoma of the hilum, typically shows stenosis of the central right and left and common hepatic ducts, with irregular tapering of the ducts. Primary sclerosing cholangitis is characterized by multiple segmental strictures involving both the intrahepatic and extrahepatic bile ducts. Nonuniform involvement of the biliary tree by inflammatory fibrosis results in the classic "beaded" appearance. Invasion of the biliary tree by hepatocellular carcinoma may cause proximal ductal dilatation. The source of obstruction is usually extrinsic. Choledochocysts are congenital cystic dilatations of any portion of the extrahepatic bile ducts, most commonly the main portion of the main bile duct.

B

References

1. Fan ST, Wong J. Recurrent pyogenic cholangitis. In: Brumgart LH, ed. *Surgery of the liver and biliary tract*. 2nd ed. New York: Churchill Livingstone; 1994. p. 1151-61. [3rd edition now available (2 volumes + CD-ROM). Brumgart LH, Fong Y, eds. Philadelphia: W.B. Saunders; 2000.]
2. Harris HW, Kumwenda ZL, Sheen-Chen SM, Shah A, Schechter WP. Recurrent pyogenic cholangitis. *Am J Surg* 1998;176:34-7.

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