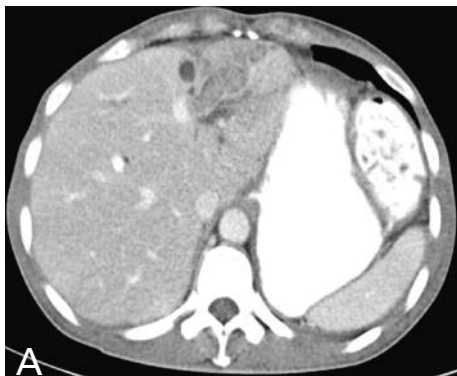


IMAGES IN CLINICAL RADIOLOGY



Oriental cholangitis

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A 51-year-old Filipino woman was referred to our department for diagnostic and therapeutic work-up of mildly abnormal liver tests.

Two years before admission, she presented with the same biochemical findings in another hospital. At that time, CT scan has been performed (Fig A) as well as an ERCP with sphincterotomy and extraction of common bile duct stones.

There was no history of abdominal pain, biliary colic, jaundice or fever. The clinical examination did not reveal any specific findings. The ERCP performed at the referring hospital showed a dilatation of the intra- and extrahepatic bile ducts, and a large intraluminal filling defect in the left hepatic duct, compatible either with a stone or with a tumor in the left hepatic duct.

To further investigate the bile duct system, MRCP was performed first. It showed a high-grade stricture of the left hepatic duct and a mildly irregular, saccular dilatation of the left intrahepatic ducts with sludge and multiple stones. These findings already suggested the diagnosis of oriental cholangitis.

The MRI also showed a dilatation of the right intrahepatic ducts and of the common bile duct down to the papilla of Vater. A mechanical fibrotic stenosis at the level of the papilla, as it can be seen with oriental cholangitis, was suspected.

ERCP confirmed the presence of stones in the left hepatic duct, as well as the presence of a stricture by demonstrating a "missing-duct sign" of the left hepatic duct; it also showed a marked decrease in arborization of the right hepatic ducts (Fig B and C).

Due to the severe strictures of the left hepatic duct we thought that endoscopic removal of these stones would be impossible, so it was decided to perform a percutaneous transhepatic cholangiography (PTC) and percutaneous cholangioscopy (PTCS) with electrohydraulic lithotripsy via the right approach.

After three PTCS procedures, a complete removal of all intrahepatic stones could be obtained.

The patient could be discharged from the hospital and a control MRCP was planned six months later.

Comment

Oriental cholangiohepatitis or oriental cholangitis is characterized by the presence of hepatolithiasis. This is defined as the presence of gallstones in the bile ducts peripheral to the confluence of the left and right

hepatic ducts, irrespective of the co-existence of gallstones in the common duct and/or gallbladder.

The disease is endemic in South-East-Asian countries but is now being encountered more often in Western societies due to an increased incidence. The highest incidence of hepatolithiasis occurs in the fifth to sixth decades. The presentation of oriental cholangitis includes abdominal pain, jaundice, attacks of fever and chills. Longstanding intrahepatic gallstones frequently lead to cholangitis and sepsis, but in addition they are associated with an increased risk of cholangiocarcinoma.

In contrast to gallbladder stone-disease, oriental cholangitis is relatively intractable and is characterized by frequent recurrences, demanding multiple operative interventions.

The radiologic workup can consist of ultrasonography, CT scan and MRI. These non-invasive imaging modalities should not only be used to diagnose the presence of the intrahepatic stones, but more importantly to evaluate the location of the stones, the presence of biliary strictures and of a concurrent cholangiocarcinoma.

Nevertheless, even with progression of modern imaging techniques, invasive techniques such as ERCP and PTC are indispensable for detailed diagnosis and, especially, for accurate treatment.

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