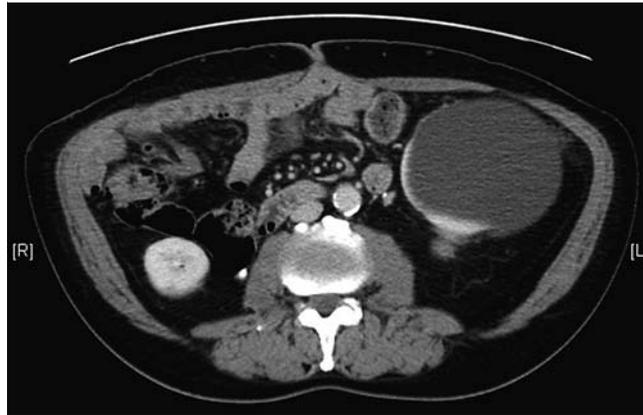


## Fasciola hepatica

A 70-year-old man who lived mostly in Albania and Greece but traveled regularly to the United States presented to his physician (in Greece) with a 2-week history of right flank pain in December 2010. Urinalysis was negative but he was treated with antibiotics for a presumed urinary tract infection. He then traveled to the United States and due to persistent discomfort in the right flank he consulted a primary care physician. His physical examination was unremarkable and laboratory investigations revealed mild anemia, leukocytosis, and mild renal insufficiency. His liver function was normal and urinalysis demonstrated microscopic hematuria. Contrast-enhanced computed tomography demonstrated segmental biliary ductal dilation involving the left lateral segment, suggesting a caliber change proximal to the hilum. There was enhancement of the biliary tree, and other findings included bilateral renal cysts and an enlarged prostate (▶ Fig. 1). Endoscopic retrograde cholangiopancreatography (ERCP) demonstrated several mobile filling defects within the common hepatic duct and left intrahepatic duct (▶ Fig. 2). Cholangioscopy was carried out with the Spyglass system (Boston Scientific, Natick, Massachusetts, USA) and mobile flat worms were identified within the biliary tree. A sphincterotomy was done and a balloon used to extract the worms into the duodenum. Several live worms were caught with a spiral basket and were identified as *Fasciola hepatica* (▶ Video 1) on laboratory examination. The patient was treated with triclabendazole.

*Fasciola* is an uncommon cause of biliary obstruction in the United States but is commonly seen in sheep-rearing areas [1]. There are multiple case reports and reviews of *F. hepatica* [2–4], and our case is an unusual presentation. The patient presented with an incidental finding of biliary dilation with normal liver function. This is the first case report of cholangioscopic visualization of *Fasciola*. Cholangioscopy with Spyglass is commonly used



**Fig. 1** Renal cysts in a 70-year-old man with persistent discomfort in the right flank.



**Fig. 2** Filling defects within the common hepatic duct and left intrahepatic duct.

in the evaluation of indeterminate pancreaticobiliary strictures and in the treatment of common bile duct stones [5]. Visual diagnosis is the hallmark of cholangioscopy and the results of the Spyglass Registry study demonstrate its utility. The reported sensitivity and specificity of the cholangioscopic visual diagnosis is 78% and 82%, respectively, whereas the sensitivity and specificity for cholangiography is lower (51% and 54%, respectively) [6]. The readily available device serves as a versatile tool in the evaluation of the pancreaticobiliary tree.

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### Video 1

Cholangioscopic visualization of *Fasciola*.

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