Gallbladder distension caused by tumoral obstruction of the common bile duct (Courvoisier’s sign)

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A 77-year-old man presented in the Emergency Unit because of abdominal pain, jaundice, and dark urine. A soft and movable mass with mild tenderness located in the right upper abdominal quadrant was found in the physical exam. A transcutaneous abdominal ultrasound disclosed a gallbladder hydrops with early wall edema, without cholecystolithiasis (Fig. 1). It was due to a biliary obstruction caused by a 4.8 x 2.8 cm mass located in the pancreatic head, presumably neoplastic in nature. Gallbladder distension caused by distal obstruction of the common bile duct by a tumor is known as Courvoisier’s sign (1). As there was risk of gallbladder wall perforation, an ERCP was performed with the intention of relieving bile duct obstruction. During the endoscopic procedure (Fig. 2) a stricture was found both in the main pancreatic duct and the common bile duct. As little contrast medium as possible was injected, trying not to distend the gallbladder even more. A brush cytology was performed from the pancreatic duct and a non-covered self-expanding metal stent (Wallstent) was inserted in the bile duct (Fig. 3). A few hours later the patient’s clinical condition improved and abdominal pain disappeared. An abdominal MRI performed on the next day (Fig. 4) showed a large gallbladder, but hydrops signs had vanished. The biliary wallstent did not interfere with the radiological exam. For several decades now, biliary endoscopy (ERCP) is the method of choice to solve, at least initially, common bile duct obstruction (2,3).
REFERENCES


Fig. 3. Biliary self-expanding metal stent immediately after insertion. A waist is seen in its distal portion due to tumor compression.

Fig. 4. Abdominal MRI after biliary endoscopic drainage. A big size gall-bladder is seen but without distension.