

# The Clinical Picture

## The Courvoisier sign

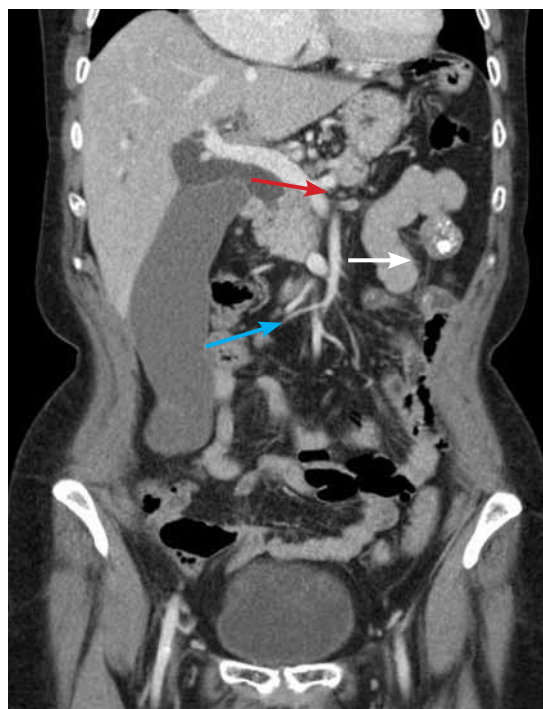
A 60-YEAR-OLD WOMAN has had jaundice, dark-colored urine, and light-colored stools for the past several days. She has no history of jaundice or gallstone disease.

With the exception of a palpable gallbladder, the physical examination of the abdomen is unremarkable. Computed tomography of the abdomen reveals a mass in the head of the pancreas, a dilated proximal biliary duct, and a severely distended and elongated gallbladder (FIGURE 1).

Over a century ago, Courvoisier observed that a palpable gallbladder in a patient with obstructive jaundice is often caused by a non-calculus abnormality of the biliary system, such as pancreatic cancer or cholangiocarcinoma, distal to the insertion of the cystic duct.<sup>1-4</sup> He attributed his findings to a higher likelihood of fibrosis of the gallbladder, with stone disease rendering it less distensible.<sup>4</sup>

Although often associated with malignancy, the Courvoisier sign can also be seen in benign processes causing obstruction of the common bile duct.<sup>5</sup>

For decades after its initial description, the Courvoisier sign was used as an important sign for the differential diagnosis of jaundice, but advances in diagnostic imaging have led to a more accurate and earlier diagnosis with less reliance on this sign. In this patient, tissue diagnosis confirmed a clinical suspicion of pancreatic adenocarcinoma. ■



**FIGURE 1.** Computed tomography shows a pancreatic mass (white arrow) causing dilatation of the bile duct (red arrow) and a severely distended and elongated gallbladder (blue arrow).

The Courvoisier sign is also seen in benign processes that obstruct the common bile duct

### REFERENCE:

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4. **Fitzgerald JE, White MJ, Lobo DN.** Courvoisier's gallbladder: law or sign? *World J Surg* 2009; 33:886–891.
5. **Parmar MS.** Courvoisier's law. *CMAJ* 2003; 168:876–877.

**ADDRESS:** Mansour A. Parsi, MD, Center for Endoscopy and Pancreatobiliary Disorders, Digestive Disease Institute, A31, Cleveland Clinic, 9500 Euclid Avenue, Cleveland, OH 44195; e-mail [parsim@ccf.org](mailto:parsim@ccf.org).