

Choledocholithiasis

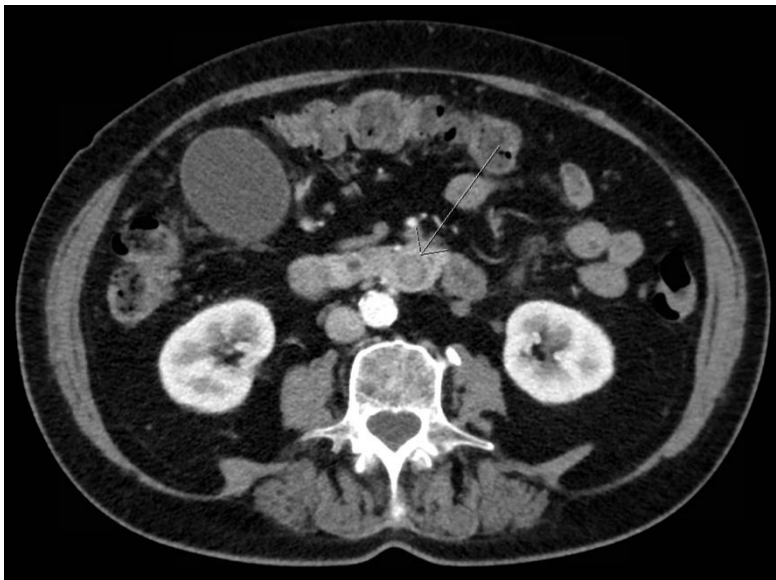
Jonathan Peña, MD*

*University of California, Irvine, Department of Emergency Medicine, Orange, CA

Correspondence should be addressed to Jonathan Peña, MD at jdpenna@uci.edu

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History of present illness: A 75-year-old female presented with jaundice and abdominal pain for 3 weeks. She denied any fevers, confusion, or urinary complaints. On exam, she was afebrile and hemodynamically normal, but had focal tenderness in her right upper quadrant. Her neurologic exam was normal.

Significant findings: Computed tomography (CT) was significant for two large gallstones measuring 1.1 centimeters impacted at the level of the pancreatic head with associated common bile duct (CBD) dilatation.

Discussion: Choledocholithiasis is characterized by the presence of gallstones in the CBD. As one ages, the common bile duct enlarges, facilitating the passage of a gallstone into the CBD increasing the likelihood of developing choledocholithiasis.¹ Complications associated with choledocholithiasis include pancreatitis, biliary cirrhosis, and acute cholangitis. Charcot's triad (fever, right upper quadrant pain, and jaundice) is the classic presentation for acute cholangitis; however, only 50%-75% of patients have all three symptoms.² Significant mortality is associated with Reynaud's pentad, or the development of fever, right upper quadrant pain, jaundice, hypotension, and altered mental status.³

Sonographic measurement of CBD diameter, from inner wall to inner wall, is often sufficient for the diagnosis. Normal diameter increases 1 mm with every decade of life, with 8.5 mm having been described as the upper limit of normal.⁴ However, CBD dilatation up to 10 mm after cholecystectomy has been described.⁵ Sensitivity of an enlarged CBD in diagnosing choledocholithiasis varies from 20%-90%.⁶ In some cases, CBD dilatation is not recognized on ultrasound, but is later found on CT imaging. Sensitivity of CT has been documented as high as 65%-93% with specificities approaching 100%.⁷

Due to lower morbidity and mortality rates, endoscopic retrograde cholangiopancreatography (ERCP) is the preferred modality for decompression of the biliary system. Some studies quote mortality rates of ERCP as low as 4.7%-10% compared to 10%-50% with open surgical decompression.^{8,9}

Topics: Abdominal, gastroenterology, GI, gallstone, gallbladder, choledocholithiasis, common bile duct, CBD, endoscopic retrograde cholangiopancreatography, ERCP.

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