Cholecysto-colonic Fistula Manifesting as Pneumobilia and Gastrointestinal Bleed

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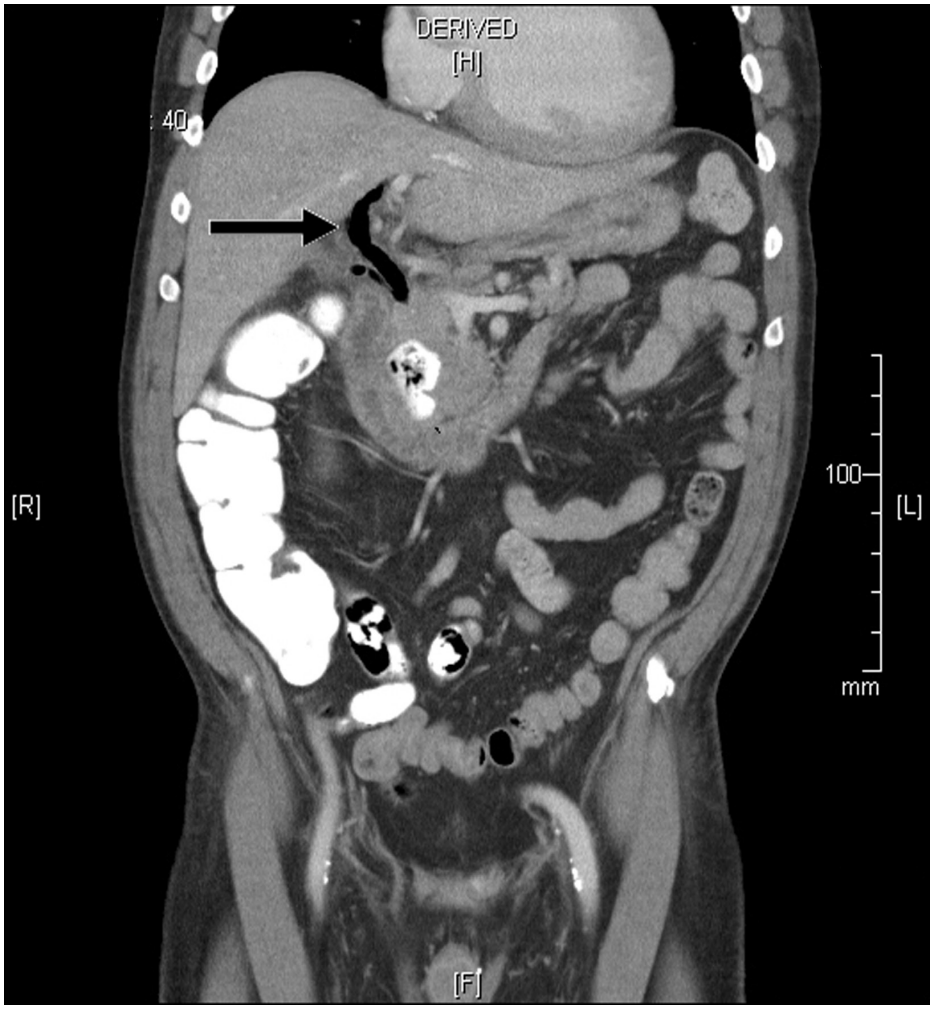

Figure 1. Coronal section of abdominal computed tomography scan with contrast shows presence of pneumobilia (arrow).

A 60-year-old male presented with self-limited transient right upper quadrant abdominal pain associated with dyspepsia of a few days duration. Examination revealed right upper quadrant tenderness with negative Murphy's sign. Laboratory results showed abnormal ALT (129u/L), AST(165 u/l), total bilirubin (1.3mg/dl) and WBC count (12,800/microL).

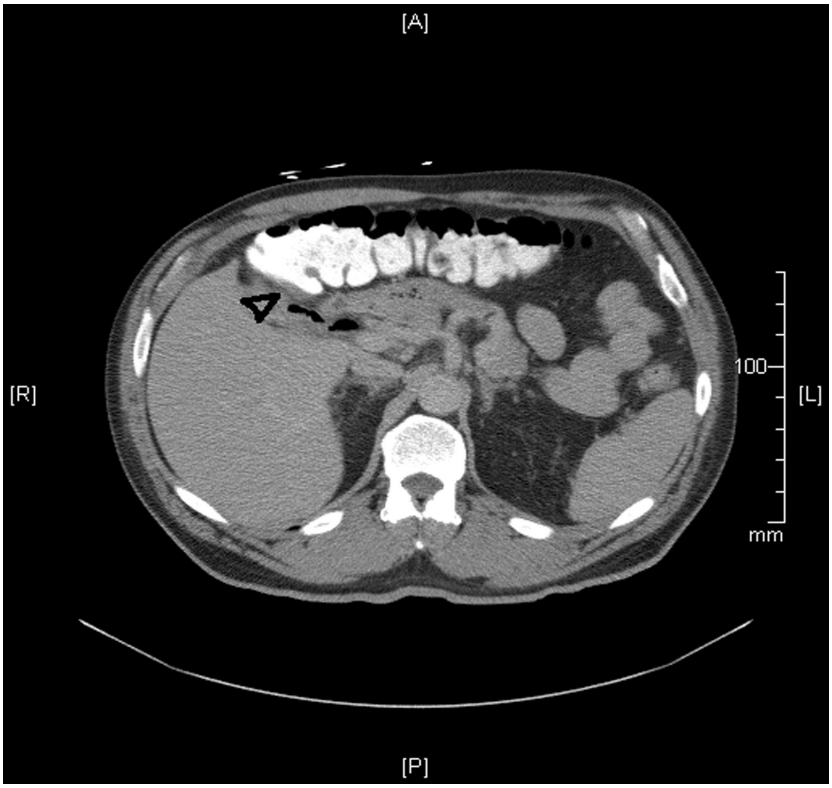

Figure 2. Transverse section of abdominal computed tomography scan with contrast shows gallbladder adherent to transverse colon (arrowhead).

Ultrasound of the abdomen demonstrated gall bladder stones with thickened gall bladder, and his symptoms were attributed to cholecystitis. His pain exacerbated two days later. Total bilirubin rose to 3.1 mg/dl and alkaline phosphatase increased from normal to 257 u/L. However, this pain resolved spontaneously within a day with subsequent improvement of liver function tests. Patient simultaneously developed transient self-limited lower GI bleed. A computed tomography scan showed presence of pneumobilia (Figure 1) with a collapsed gallbladder closely apposed to transverse colon (Figure 2). The clinical condition of the patient continued to improve, supporting resolution of cholangitis. The patient later underwent a laparoscopic cholecystectomy and was identified to have cholecysto-colonic fistula that we presume decompressed the biliary system. This fistula was the most likely source of lower gastrointestinal bleed since a colonoscopy ruled out other causes. Cholecysto-intestinal fistulae are an unusual but established cause of gastrointestinal bleed.[1] They often occur in association with Mirizzi's syndrome and rarely may accompany gall bladder malignancy. Pneumobilia is usually considered an indicator of worsening cholangitis in a patient with deteriorating clinical condition. Nonetheless, physicians and surgeons should be aware that it could be a hallmark of fistulization of the biliary system into the gut in a clinically improving patient of cholecystitis or cholangitis.

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