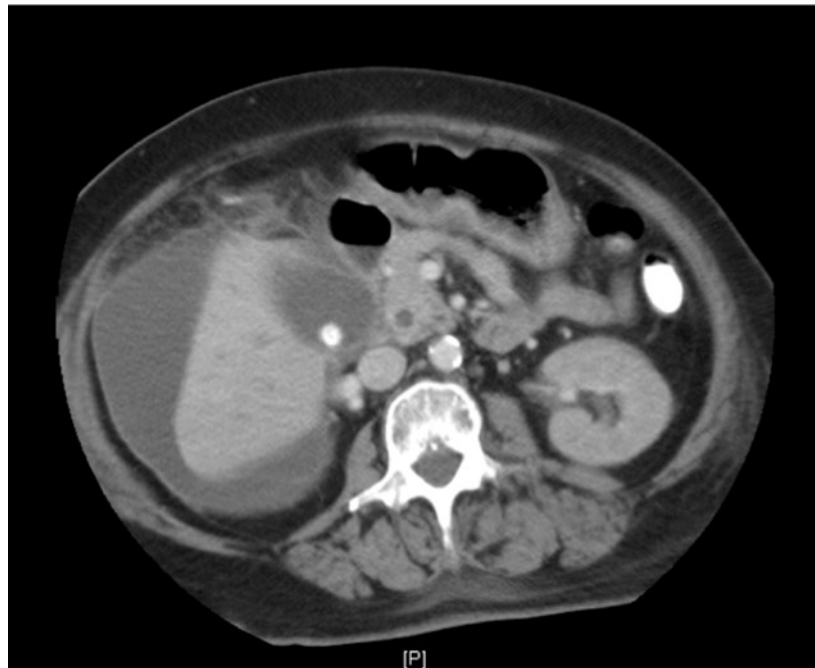


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A 65-year-old lady presented with a 3-day history of high-grade fever, right hypochondrium pain and jaundice. Clinically she was septic and biochemically it showed features of biliary obstruction. A computed tomography scan of the abdomen was performed.

What is the diagnosis?

Answer: refer to page 41

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(Refer to page 27)

ANSWER : Spontaneous biloma due to a floating common bile duct calculus

The above patient had a spontaneous biloma. It was associated with a floating calculus in her common bile duct. The calculus has produced an increase in the intra-ductal pressure and caused this rather large collection.

Spontaneous biloma has been coined to explain the phenomenon when a biloma occurs without any invasive procedures. It is commonly associated with choledocholithiasis and is postulated to occur due to raised intra-ductal pressure as a result from the obstruction to the CBD from calculus, tumour and also spasm of the sphincter of Oddi^{1,2}. Bilomas are most common at the subphrenic and subhepatic region. Subcapsular bilomas are less common and are usually associated with abdominal surgery or trauma.

In the present case, the cause of the obstruction was probably choledocholithiasis with increased intraductal pressure. This is compounded by poor parenchymal support for distal biliary radicals which can cause sub-capsular leakage.

Imaging investigations are integral in diagnosing and managing bilomas. Ultrasonography is the most sensitive modality to detect a biloma but is operator dependent. Computed tomography is optimal for assessing and delineating bilomas. It can measure the dimensions, the probable content of the collection and the underlying cause³. Computed tomography may also rule out other differential diagnosis such as hematomas, seroma, liver abscess, cysts and pseudocysts. Bilomas are usually measured less than 20 hounsfield units (HU)³. Radiological guided drainage is the preferred treatment. The contents must be inspected to rule out infection and it must be sent for bilirubin analysis to confirm the diagnosis.

REFERENCES

- 1: Gould L, Patel A. Ultrasound detection of extrahepatic encapsulated bile : "biloma". *AJR Am J Roentgenol.* 1979;139:1014-5.
 - 2: Urbain, D, Muls, V, Kiromera, A, et al. Non-traumatic intrahepatic rupture of the biliary tree with biloma: The place of ERCP. *Gastrointest Endosc.* 1992;38:379-381.
 - 3: Vasques JL, Thorsen MK, Dodds WJ, et al. Evaluation and treatment of intraabdominal biloma. *AJR Am Roentgenol.* 1985;144:933-8.
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