Septal gallbladder as a cause of chronic abdominal pain

Vesícula multiseptada, causa de dolor abdominal crónico

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Summary
Congenital malformations of the gallbladder are varied and some of them are very rare, as is the case of the septal gallbladder. This is not a frequent pathology, it is usually an incidental imaging finding in patients with chronic abdominal pain, most of them older adults, so it is important to know and recognize it. It can be diagnosed with all imaging methods from ultrasound to magnetic resonance, which is why it is important for professionals in this branch to know and recognize it.

Resumen
Las malformaciones congénitas de la vesícula son variadas y algunas de ellas muy raras, como es el caso de la vesícula tabicada. Esta no es una patología frecuente, generalmente es un hallazgo imagenológico incidental en pacientes con dolor abdominal crónico, la mayoría de ellos adultos mayores, por lo que es importante conocerla y reconocerla. Se puede diagnosticar con todos los métodos de imagen, desde la ecografía hasta la resonancia magnética, por lo cual cobra importancia para los profesionales de esta rama tener conocimiento claro de sus manifestaciones.

Case report

An 84-year-old female patient with a history of breast cancer ten years ago and untreated parkinsonism. She reported sporadic episodes of abdominal pain located in the right hypochondrium several years ago, which subsided spontaneously; she went to the emergency department for dyspnea, exacerbated abdominal pain and gastrointestinal discomfort.

Laboratory tests showed no evidence of alterations in liver enzymes, gamma GT and alkaline phosphatase. It was decided to perform an imaging evaluation with simple computed axial tomography (CT) of the thorax and abdomen.

In the abdominal CT scan without contrast medium, multiple septa or spontaneously dense internal septa forming cystic cavities are identified in the gallbladder, giving a multiloculated "honeycomb" appearance and biliary mud, with scarce perihepatic fluid.

Discussion

Multiseptate gallbladder is an extremely rare congenital anomaly (1), included within the shape anomalies, characterized by the presence of multiple septa dividing the gallbladder lumen.

This is most likely the effect of incomplete vacuolization of the developing gallbladder bud or persistent "wrinkling" of the gallbladder wall (2). As a result, the lumen remains divided by many partitions, formed by mucosa, submucosa and muscle extending from the outer wall into the lumen, the small cavities communicate freely with each other and, therefore, although emptying of the gallbladder may be delayed, it is not obstructed (3).

Patients with multiseptated gallbladder are usually admitted to emergency departments for pathologies other than abdominal pain or sometimes present with symptoms such as abdominal discomfort, persistent pain, nausea and/or vomiting (2).

The most frequent form of clinical presentation is chronic pain in the right upper quadrant (4), although some patients remain asymptomatic and it is discovered by chance (5). In addition, pain in the epigastrium, biliary colic, cholecystitis or even pancreatitis have been described, although less frequently (1).

The septa are the reason for the retardation of gallbladder motility, which causes stasis in the biliary flow, and seems to be the cause of recurrent abdominal pain (2).

Since it is a congenital entity, it usually occurs in isolation or associated with other anomalies of the biliary tract, such as gallbladder hypoplasia, common bile duct cysts, gallbladder ectopia and anomalies of the biliopancreatic junction (5).

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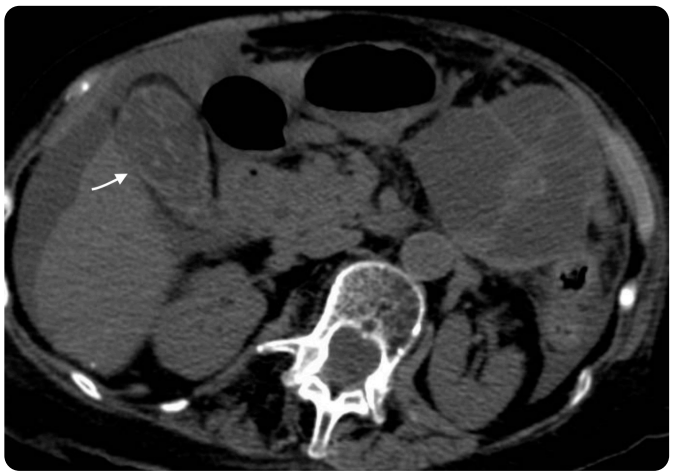

Figure 1. Axial CT scan without contrast medium. Multiloculated aspect gallbladder, divided by multiple thin septa (white arrow), with scarce amount of perihepatic fluid.

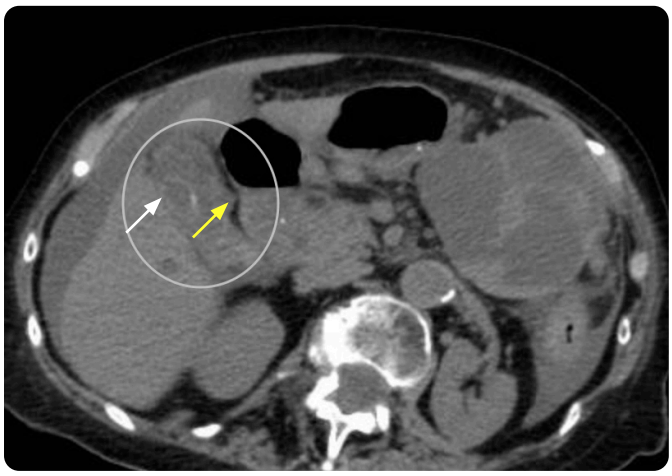

Figure 2. Axial CT scan without contrast medium. Gallbladder with septa (white arrow) and biliary mud in the bacinete (yellow arrow), and scarce amount of perihepatic liquid.

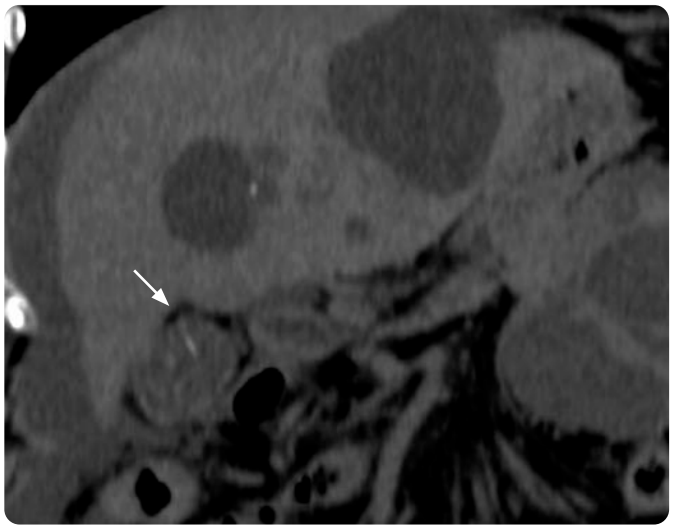

Figure 3. CT coronal section without contrast medium. Multiple septa within the spontaneously dense gallbladder (white arrow), with scarce amount of perihepatic fluid.

Figure 4. CT sagittal view without contrast medium. Multiple septa within the spontaneously dense gallbladder (white arrow), with scarce amount of perihepatic fluid.

Despite being an infrequent entity, the multiseptate gallbladder does not usually present diagnostic problems. Ultrasound is the method of choice for its diagnosis (4); however, as it can be an incidental finding, it is feasible to discover it with any imaging method. Adenomyomatosis, cholesterosis, necrotizing cholecystitis and hydatid cyst can sometimes create confusion (6).

In asymptomatic patients no surgical treatment is required, while in symptomatic cases cholecystectomy is indicated, preferably by laparoscopy (1).

Cholecystectomy should also be considered in elderly and asymptomatic patients in whom this entity is discovered incidentally, because the possibility of undetected carcinoma of the gallbladder has been documented (7) (Figures 1-4).

Conclusion

Although the incidence of this entity is very low, it is important to be aware of it and to know how to identify it. Despite being an incidental finding in older adult patients it may be the cause of chronic abdominal pain that requires treatment to improve their quality of life.

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