Abdominal Radiology (2019) 44:1627–1628
https://doi.org/10.1007/s00261-018-1850-3

CLASSICS IN ABDOMINAL RADIOLOGY

The "honeycomb" gallbladder

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Published online: 28 November 2018

A bee's honeycomb (Fig. 1) has been used to metaphorically describe the sonographic imaging appearance of a multiseptated gallbladder [1]. This rare anomaly is produced by a thickened gallbladder wall with numerous non-shadowing echogenic septa crisscrossing the lumen (Fig. 2). Histologically, these septations consist of epithelial layers with an interposed muscular layer [2]. The etiology of the multiple septations is uncertain, but favored embryologic theories include a failure of the solid gallbladder bud to fully cavitate/vacuolize, persistent wrinkling (as seen in animal models), or gallbladder bud growth that outpaces the bed resulting in coiling or kinking [3]. The honeycomb gallbladder may also be acquired, possibly secondary to chronic inflammation [4].

Whether congenital or acquired, the honeycomb gallbladder may be asymptomatic and found incidentally [2] or discovered as a result of the patient's symptoms. When symptomatic, the patient may present with vague intermittent right upper quadrant pain or frank biliary colic. Symptoms are likely due to altered flow of bile through the cystic spaces which result in stagnation and reduced bile flow [3].

The diagnosis of a "honeycomb" or multiseptated gallbladder may be made solely on the basis of the ultrasound appearance. However, other imaging modalities, including computed tomography and magnetic resonance cholangiopancreatography, may show the characteristic findings, and can confirm the diagnosis. Treatment for symptomatic cases is cholecystectomy [5] (Fig. 3).

Fig. 1 Multiple hexagonal cells of a bee's honeycomb, as seen in the right side of the image, create a multiseptated appearance. (Free image download courtesy of pixabay.com on 10/25/2018)

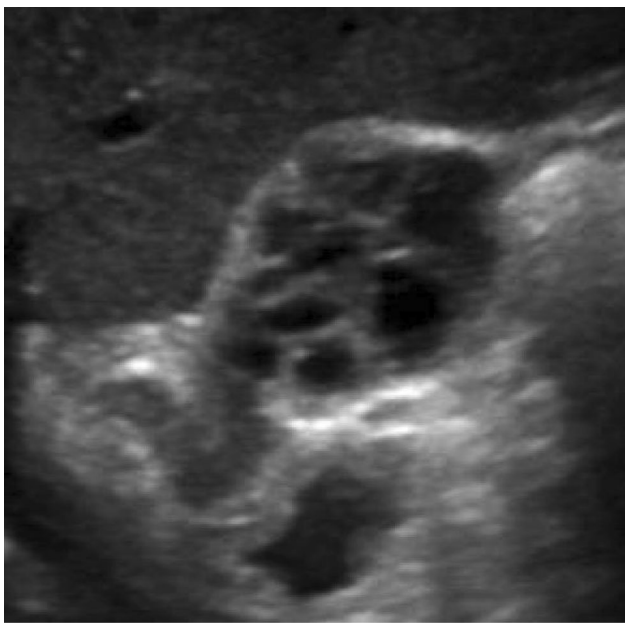

Fig. 2 Longitudinal gray scale image of the right upper quadrant shows multiple intraluminal septations in the gallbladder lumen resulting in a "honeycomb" appearance

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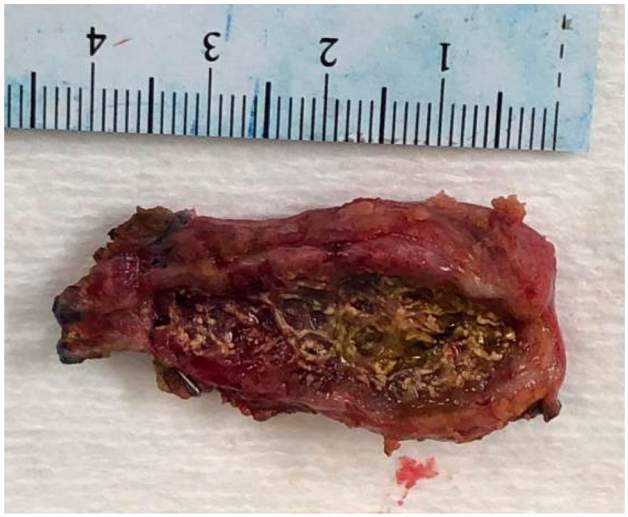

Fig. 3 Post cholecystectomy specimen from the same patient shown in Fig. 2 with the gallbladder wall longitudinally incised and reflected, demonstrates numerous cystic spaces and intraluminal septations

Funding None.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Research involving human and animal rights This article does not contain any studies with human participants or animals performed by any of the authors.

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