

Images in Hospital Medicine

# A Unique Division of Abdominal Pain Etiologies: Multiseptated Gallbladder

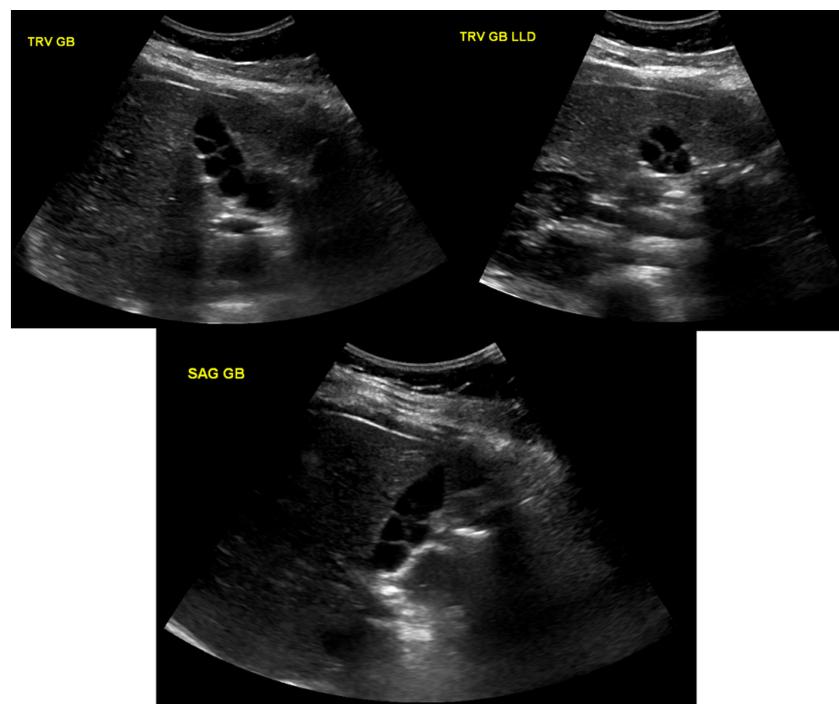
Anmol Mittal, MD<sup>1</sup> , Sushil Ahlawat, MD<sup>1</sup>, Eric Tien Yen Chyn, MD<sup>1</sup>

<sup>1</sup> Medicine, Rutgers New Jersey Medical School

Keywords: gallbladder, abdominal pain, epigastric pain, acid reflux, honeycomb gallbladder, multiseptated gallbladder, MSG, ultrasonography, gerd  
<https://doi.org/10.26300/k798-pm14>

Vol. 1, Issue 2, 2022

Multiseptated or honeycomb gallbladder is an extremely rare variant described in only 150 cases worldwide. It has been commonly noted as a congenital anomaly or among octogenarians. Here, we describe a young woman who presented with epigastric pain and recurrent burning sensation, and diagnosed to have multiseptated gallbladder.



**Figure 1. Sagittal, transverse, and transverse-left lateral decubitus views of the gallbladder.**

A 24-year-old woman presented with epigastric pain since her teenage years. She reported no medical history. She reported a burning sensation that occurred two to three times a month, but symptoms persisted for one week prior to admission – lasting from minutes to hours. Relieving factors included leaning forward in a fetal position and antacid use. Her exam was significant for epigastric and right upper quadrant tenderness. Laboratory testing was unremarkable except for a positive stool *H. pylori* antigen test. Abdominal ultrasound revealed an abnormal gallbladder (Figure 1). The patient was diagnosed with a multiseptated gallbladder (MSG).

MSG, also referred to as honeycomb gallbladder, is an extremely rare variant only described in 150 cases worldwide. Two competitive hypotheses described early in 1970 by Bhagavan et al. included the failure of preformed sep-

tations to disappear or the creation of septations due to untimely growth of the gallbladder. MSG was thought of only as a congenital anomaly until cases were described secondary to inflammation.<sup>1-3</sup>

The second decade is the age group where this is observed commonly though cases in octogenarians have been described. Some patients are asymptomatic; however, most patients have abdominal pain or nausea/vomiting. Most patients are not tender, but occasionally they can have abdominal tenderness, either generalized or in the right upper quadrant.<sup>2,3</sup> Ultrasonography is typically sufficient to demonstrate septations. Most patients do not have cholelithiasis or biliary sludge, and there is no evidence of wall thickening or enlargement. MRCPs aren't regularly performed for diagnosis.<sup>2</sup>

Treatments for these patients include medical therapy, including ursodeoxycholic acid, dicyclomine, H<sub>2</sub> receptor antagonist, or anticholinergics, and surgical therapy with laparoscopic cholecystectomy. Special considerations must be taken for elderly patients or those with coexisting biliary tract diseases as the risk for gallbladder malignancy is higher. A prophylactic laparoscopic cholecystectomy can be considered in this patient population to prevent mortality.<sup>4</sup> Multiple cases report improvement of abdominal symptoms with cholecystectomy though there is a lack of follow-up. Our patient was trialed on proton pump inhibitors due to the additional presence of epigastric pain and burning sensation.<sup>2</sup>

CORRESPONDING AUTHOR

Anmol Mittal, MD  
Department of Internal Medicine  
Rutgers New Jersey Medical School  
185 South Orange Ave, Newark NJ 07103  
[anmol@mittalsoft.com](mailto:anmol@mittalsoft.com)  
(T) 973-972-6056  
(F) 973-972-3129

CONFLICTS OF INTEREST STATEMENT

This article was not funded by any organization. The authors declare they have no conflicts of interest.

Submitted: April 29, 2022 EDT, Accepted: May 05, 2022 EDT

.....



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CCBY-NC-4.0). View this license's legal deed at <https://creativecommons.org/licenses/by-nc/4.0> and legal code at <https://creativecommons.org/licenses/by-nc/4.0/legalcode> for more information.

## REFERENCES

1. Bertozzi M, Bizzarri I, Angotti R, et al. Multiseptate gallbladder in a child. *J Pediatr Surg Case Rep.* 2019;45:101212. [doi:10.1016/j.epsc.2019.101212](https://doi.org/10.1016/j.epsc.2019.101212)
2. Sasaki M, Tokunaga Y, Minami N. The honeycomb gallbladder: a new category of acquired pseudo-multiseptate gallbladder. *J Hepatobiliary Pancreat Surg.* 2004;11(5):375-378. [doi:10.1007/s00534-004-0909-4](https://doi.org/10.1007/s00534-004-0909-4)
3. Terkawi RS, Qutob D, Hendaus MA. Understanding multiseptated gallbladder: a systematic analysis with a case report. *JGH Open.* 2021;5(9):988-996. [doi:10.1002/jgh3.12621](https://doi.org/10.1002/jgh3.12621)
4. Oyachi N, Numano F, Koizumi K, Takano A, Shibusawa H. Multiseptate gallbladder coexisting with pancreaticobiliary maljunction treated by laparoscopic cholecystectomy: report of a pediatric case. *Surg Case Rep.* 2022;8(1):16. [doi:10.1186/s40792-022-01370-4](https://doi.org/10.1186/s40792-022-01370-4)