Letter to Editor

A Septate Gallbladder in an Adult

Dear editor:

A wide variety of congenital anomalies of the gallbladder affecting its shape, size, number, and position have been described but are seldom encountered in clinical practice.

Septate gallbladder is a very rare anomaly that has an asymptomatic course and is detected as an incidental finding without clinical relevance. Rarely, however, septate gallbladder causes recurrent attacks of abdominal pain or becomes complicated by cholelithiasis.[1,2] The pinpoint communication between the cavities causes stagnation, inflammation or stone formation. Symptoms are usually caused by pressure in the small chambers of the gallbladder along with delayed emptying which may sometimes favour early cholecystectomy.[3] Ultrasonography is the modality of choice.

A 34-year-old female presented with severe burning pain after the intake of a spicy meal. There was no history of vomiting or nausea. No similar history was recorded and the general examination was normal. Abdominal examination revealed mild tenderness. The abdominal X-ray was normal. Routine blood chemistry and liver function tests were normal. Abdominal sonography using a 3.5 MHz probe showed an echogenic band bridging the lumen of the gallbladder suggestive of septa with calculi in both chambers and no features of acute cholecystitis. The patient was managed conservatively as a case of acid peptic disease. In view of anomalous gallbladder and multiple calculi, the patient underwent elective laparoscopic cholecystectomy, with the gallbladder having grossly no features of acute cholecysitis .A look inside the gallbladder showed a transverse septate completely partitioning the junction of the body and the infundibulum .There was a 1mm minute opening in the middle of the septum. Both chambers contained multiple cholesterol stones. Histopathology reported a normal gallbladder.

There is lack of elaborated description in literature about a septate gallbladder because of its asymptomatic course which is accidentally discovered during the evaluation of jaundice or at postmortem examination.[4-6] A misjudgement in such cases often leads to an unnecessary prolongation of the interval between diagnosis and operative treatment. Septate gallbladder most likely results from incomplete resolution of the solid stage of gallbladder development that is present

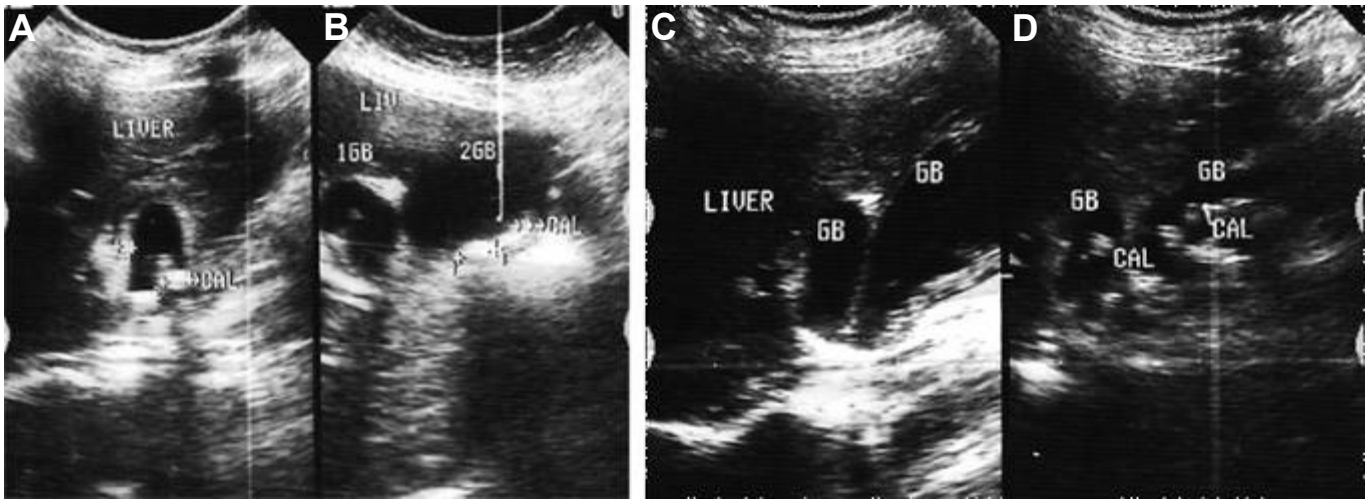

Fig. 1. A. Abdominal ultrasound showing a gallbladder with calculi.

B. Abdominal ultrasound showing a septate gallbladder with multiple calculi.

C. Abdominal ultrasound showing a septa dividing the gallbladder in two chambers.

D. Abdominal ultrasound showing calculi present in both chambers of the septate gallbladder.

before the third fetal month. Post inflammatory adhesions and compartmentalization of the gallbladder have also been described in septum formation. Septate gallbladder is characterized by the presence of a septum that divides the gallbladder into two cavities. The septum may lie longitudinally or transversely. When the septum dividing the gallbladder lies longitudinally, it is called bilobed gallbladder. A gallbladder having transverse septum separating the fundus from the rest of the gallbladder is called an hour-glass gallbladder. The septum which contains smooth muscle fibers usually divides the gallbladder into two chambers. Normally, in an hour-glass gallbladder, the two compartments communicate through an opening in the septum that is variable in size. The number of septae can be single or multiple. Mostly, they are single. Bile stasis is possibly incriminated secondary to gallbladder septation as the predisposing factor for cholelithiasis.[7] Sometimes it can be misdiagnosed as choledochal cyst or leads pitfalls at ultrasound imaging, causing a false-positive diagnosis of gallstones.[5,6] Diagnosis is made by ultrasound, having a flat fundus, and an elongated and dilated gallbladder.[8] Other investigative procedures used for diagnosis are cholecystogram, coupled with biliary scintigraphy, ERCP and CT scan.

In our case, septa of the gallbladder was an accidental finding and probably congenital in origin. Lack of symptoms of acute cholecystitis and normal histopathology are the predominant manifestations. A small opening in the septum with calculi exceeding the size of the opening in both chambers favours bile stasis and separate calculi formation.

Authors:
Imtiaz Wani [1]
Mudasir Maqbool [2]
Omar Kirmani [2]

1. Postgraduate Department of Surgery, S.M.H.S Hospital, Srinagar, Kashmir, India.
2. Department of Radiology, S.M.H.S Hospital, Srinagar, Kashmir, India.

Corresponding Author: Imtiaz Wani
Email: imtazwani@yahoo.com
Tel: +941-990-4864

References

1. Esper E, Kaufman DB, Crary GS, Snover DC, Leonard AS. Septate gall bladder with cholelithiasis: a cause of chronic abdominal pain in a 6-year-old child. J Pediatr Surg 1992;27;1560-2.
2. St-Vil D, Luks FI, Hancock BJ, Garel L, Brochu P, Blanchard H et al. Diaphragm of the gall bladder: case report. J Pediatr Surg 1992;27:1301-3.
3. Alawneh I, Baranzanchi I, Jacobi K. Multi-septate gallbladder as a cause of colic. Med Klin 1981;27;76(7):190-1.
4. Adear H, Barki Y. Multiseptate gallbladder in a child: incidental diagnosis on sonography. Pediatr Radiol 1990;20:192.
5. Mathur RC, Mathur NC, Reddy DN, Rao GV, Mathur YC. Septate gallbladder. Indian Pediatr 1998;35:481-2.
6. Martinoli C, Derchi LE, Pastrorino C, Cittadini G. Imaging of a bilobed gallbladder. Br J Radiol 1993;66:734-6.
7. Al-Salem AH, Issa H, Naserullah Z, Septate gallbladder: a report of two cases. Ann Saudi Med 2002;22(5-6):351-3.
8. Doyle TC Flattened fundus sign of the septate gallbladder. Gastrointest Radiol 1984;9(4):345-7.