Case Report

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# Recurrent abdominal pain: Multiseptate gall bladder

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## ABSTRACT

**Aim:** We describe herein the case a pediatric patient with incidentally diagnosed multiseptate gall bladder followed-up for a year. **Case:** Seven-year-old boy admitted to our department with recurrent abdominal pain and diagnosed as multiple septa in gall bladder. All laboratory values were normal. There was no sludge in ultrasound. Magnetic resonance cholangiopancreatography didn't show any congenital abnormality. He's been abdominal pain only once in a time for the last two years. **Conclusion:** Although a rare condition in childhood, patients with multiseptate gallbladder should be followed unless without clinical symptoms.

**KEY WORDS:** Multiseptate Gall Bladder; Children; Recurrent Abdominal Pain

## INTRODUCTION

Several developmental anomalies may affect the gall bladder, including agenesis, hypoplasia, congenital cysts. Multiseptate gall bladder is a rare anomaly that approximately 50 cases have been presented in the literature [1]. Gall bladder is divided into many compartments by a thin septum which lined by columnar epithelium. It's stated by some authors that there is normal muscular layer within the septa continuous with that of the outer wall while some authors have not been agreed [2]. There are many holes between compartments which allow communication. Septa may be partial or involve the lumen of gall bladder [2]. The patient with multi septate gall bladder may be asymptomatic or may have episodic right upper quadrant pain due to biliary sludge, stones or cholecystitis.

We presented follow up of a 6 years old patient with diagnosis of multiseptate gall bladder.

## CASE

Seven-year-old boy admitted to our emergency department with abdominal pain second time of his life. He didn't have any other complaints including nausea and vomiting. His physical appearance and development was normal. At physical examination there was no sign of acute abdomen. He had no tenderness at abdomen. All laboratory examinations were normal. At ultrasonography multiple septa were seen at gall bladder but neither sludge nor calculi were found. Computed tomography also showed multiseptate gallbladder accompanied with a cyst at liver. Magnetic resonance cholangiopancreatography showed no more congenital anomaly but multiple septa. (Figure 1) Follow up decision were taken. He hasn't had any abdominal pain attack since then for the last two years.

## DISCUSSION

Abdominal pain in childhood is one of the most common causes of emergency department visits. However, gall bladder diseases as a cause of recurrent abdominal pain are mostly overlooked due to high incidence of intestinal and genitourinary etiologies. Being a rare disease multiseptate gall bladder has only been reported in small series. Overall there are almost 50 cases reported in the literature. There are many theories regarding how multiseptate gall bladder occurs, but none can prove the exact pathogenesis [3,4].

Multiseptate gall bladder must be distinguished from other congenital or acquired diseases of gall bladder such as intramural diverticulosis or inflammatory gall bladder diseases. But the characteristics of septa differ from each other. In adenomyomatosis i.e. acquired intramural diverticulosis Rokitansky-Aschoff sinuses are smaller and within the thickened gall bladder. In inflammatory diseases septa are thicker and form intraluminal compartments. In multiseptate gall bladder septa may be anywhere in the gall bladder; fundus, infundibulum or throughout the lumen [3,4]. In our case it was located throughout the lumen.

In patients with multiseptate gall bladder gallstones or sludge causing colicky abdominal pain often accompany. Nearly half of the cases reported in the literature had gallstones. However as in our cases sometimes it may be diagnosed incidentally. Some patients diagnosed while investigating the cause of any other illness and some may be diagnosed due to investigating abdominal pain [2-4].

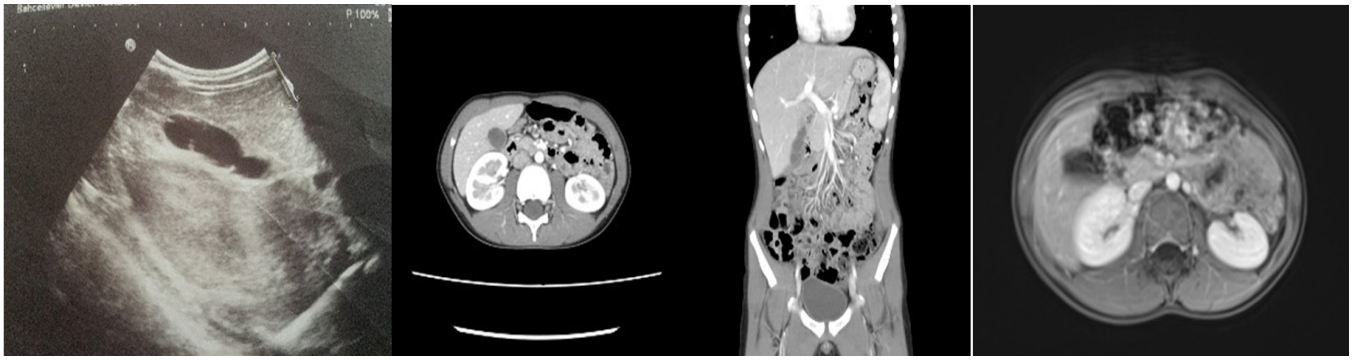

**Figure 1.** Radiological demonstration of septa in gallbladder

Ultrasonography is the first modality in diagnosis of multiseptate gall bladder. Biliary scintigraphy may be used to show impairment of gall bladder filling and emptying. But MR cholangiography is a non-invasive method without risk of radiation but need for sedation in younger. In our case even ultrasonography showed the presence of septa we performed MR cholangiography to be sure about the pathology and if there is accompanying anomaly. We didn't perform scintigraphy because there is no sludge or gall stones in gall bladder lumen and no abnormality in laboratory values.

In early literature cholecystectomy is the treatment of choice in multiseptate gall bladder. Even clinical symptoms ended after cholecystectomy pathology of the specimen didn't reveal any problem [1]. Later on, many patients have started to been followed up without any problem. The longest follow up period is reported by Geremia et al for 12 years without symptoms [5]. Due to increasing number of patients being followed up in the literature we postponed the operation time. For the last two years he's been free of symptoms such as abdominal pain or jaundice.

## CONCLUSION

Unusual pathologies of gall bladder should be remembered in children with abdominal pain when there isn't any other pathology. In case of multiseptate gall bladder one can follow up patient instead of cholecystectomy due to its benign nature.

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