

Torsion of the Gallbladder in A Child*

(Case Report)

Naci Gürses, M.D.** / Nebil Büyükpamukçu, M.D.*** /
Akgün Hiçsönmez, M.D.****

Torsion of the gallbladder is rarely seen in childhood. Less than a dozen cases have been reported in the English literature since Wendell first described the disease in 1898.¹⁻⁴

In this paper a seven year old boy undergoing cholecystectomy with the diagnosis of the torsion of the gallbladder while being operated for acute appendicitis is presented, and the etiology of the torsion of the gallbladder is briefly discussed.

Case Report

A seven year old boy was admitted to Hacettepe University, Department of Pediatric Surgery on the 10th of June, 1977 with the complaints of vomiting and severe colic pain in the right upper part of the abdomen. There was no previous history of similar pain. The patient had not had bowel movements since two days prior to his admission and had been vomiting. The family history was unremarkable.

Physical examination: Revealed a pale and acutely ill child. Temperature was 37.5 C°, pulse rate 120/min and blood pressure 120/70 mm Hg. The abdomen was slightly distended and tenderness and rigidity were observed in the right upper and lower abdomen. Bowel sounds were normokinetic. Rectal examination revealed negative results.

* From Department of Pediatric Surgery, Hacettepe University, Ankara, Turkey.

** Associate Professor in Pediatric Surgery, Nineteen of May University, Samsun, Turkey.

*** Associate Professor in Pediatric Surgery, Hacettepe University, Ankara.

**** Professor and Chairman in Pediatric Surgery, Hacettepe University, Ankara.

Laboratory examination: Hb was 14.7 g/dl, WBC 22000/mm³ Urinalysis was normal. Flat X-rays of the abdomen showed no pathology.

Preliminary diagnosis of perforated appendix was made and laparotomy was performed with a right paramedian incision. The appendix was found to be normal but the gallbladder to be distended and black in colour. It had rotated 360 degrees counterclockwise around the cystic



Figure 1

Showing appearance of the distended gallbladder due to torsion.

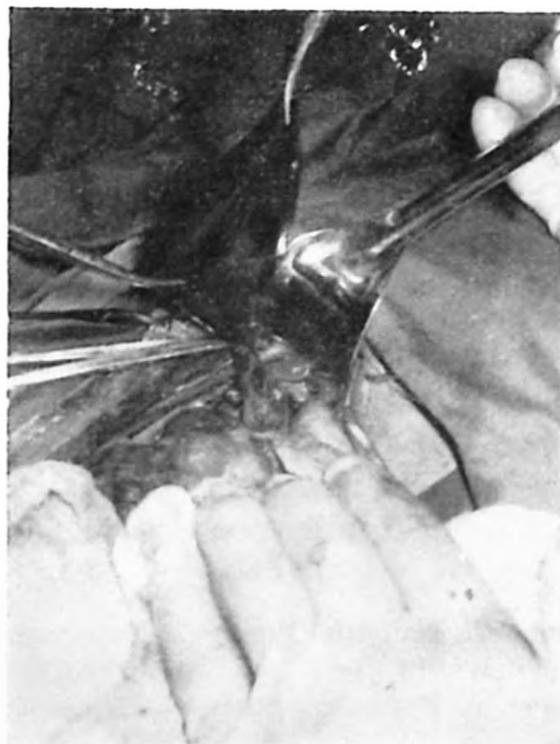


Figure 2

Demonstrating position of the detorsioned gallbladder.

duct and cystic artery. The gallbladder was completely surrounded by the peritoneum and lay freely in the abdominal cavity except for its attachment along the course of the duct and cystic artery (Figures 1, 2). Cholecystectomy was performed.

The post-operative course was uneventful and the patient was discharged on the 7th day. Post-operative follow-up 3 months later was normal.

Pathologic report of the removed gallbladder: The size of the gallbladder was 6.5x2.5x1.4 cm. It was black-purplish in colour and its walls had thinned (Figure 3). No stones were found. In the microscopic examination inflammatory reaction and hemorrhagic necrosis were found.



Figure 3
Revealing the removed gallbladder.

Discussion

The torsion of the gallbladder gets rarely a correct preoperative diagnosis, in children especially. It is usually confused with acute appendicitis as happened in our case.

Two types of congenital anomalies of the gallbladder have been reported to cause torsion of the gallbladder in children.^{1,5} In one of these, the gallbladder is completely surrounded by peritoneum and lies

free in the abdominal cavity except for its attachment along the course of the duct and cystic artery as was seen in our case and in the other the gallbladder is also completely surrounded by peritoneum and attached to the liver by a mesentery consisting of two layers of peritoneum.

The real precipitating factor of the torsion is not known in congenitally abnormal gallbladders. However, It is likely that the cause is vigorous peristalsis of the neighbouring organs.¹ In the older patients, the etiology of the torsion frequently is the loss of fat and visceropitosis.⁶

Cholecystectomy is the method of treatment.

Summary

Torsion of the gallbladder was reported in a 7 year old boy, with a brief review of the literature.

REFERENCES

1. Shah, N.: Torsion of the gallbladder in a child. *Brit. J. Clin. Pract.* 20: 535, 1966.
2. Hendry, D. T.: Torsion of the gallbladder - A case report. *S. Afr. Med. J.* 42: 15, 1968.
3. Shioda, R., Matsuda, K., Nomura, Y.: Torsion of the floating gallbladder. *Arch. Jap. Chir.* 45: 319, 1976.
4. Wendel, A. V.: A case of floating gallbladder and kidney complicated by cholelithiasis with perforation of gallbladder. *Ann. Surg.* 27: 199, 1898.
5. Phimphilai, C.: Acute torsion of the gall-bladder. *J. Med. Assoc. Thai.* 57: 28, 1974.
6. Bothra, R.: Torsion of the gall-bladder in the aged. *Brit. J. Surg.* 60: 359, 1973.