

ATYPICAL ABDOMINAL PAIN IN CHILDREN; CHOLELITHIASIS

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ABSTRACT

The gallbladder is a pear-shaped sac-shaped organ that is 8-10 cm long and 4-5 cm wide in adults. The gallbladder stores bile, which is constantly secreted by the liver. Gallbladder pathologies have an important place in patients experiencing abdominal pain symptoms. Abdominal pain in children requires a multidisciplinary approach and treatment just like adults. However, it is not as common to encounter cholelithiasis in pediatric patients as in adults.

Case report: A 3-year-old boy was brought to the emergency room by his family with complaints of abdominal pain and occasional vomiting for 2-3 days. WBC 12.33, CRP 3.44, ALT 11, AST 31, total bilirubin 0.40, GGT 18, creatinine 0.26, and no obvious pathology was detected in the laboratory tests performed. Computed tomography was performed to detect acute intra-abdominal pathology for the patient who was not relieved by the treatment. A diagnosis of cholelithiasis was made.

Although rare, cholelithiasis should be kept in mind by emergency physicians in children who come to the emergency department with the complaint of abdominal pain, and their approach should be directed towards this. At the same time, more studies are needed to eliminate the deficiencies related to gallbladder stone management and treatment in children.

Keywords: cholelithiasis; Gallbladder risk factors in children; abdominal pain

Introduction

The gallbladder is a pear-shaped sac-shaped organ that is 8-10 cm long and 4-5 cm wide in adults. The gallbladder stores bile, which is constantly secreted by the liver. Gallbladder pathologies have an important place in patients experiencing abdominal pain symptoms. Among them, gallbladder stones are the most common of all gastrointestinal system diseases, and therefore abdominal pain is one of the most common reasons for applying to the emergency department.

Abdominal pain in children requires a multidisciplinary approach and treatment just like adults. However, it is not as common to encounter cholelithiasis in pediatric patients as in adults. In this case, we aimed to describe a case of gallstones in a 3-year-old boy who applied to the emergency department with the complaint of abdominal pain.

Case Report

A 3-year-old boy was brought to the emergency room by his family with complaints of abdominal pain and occasional vomiting for 2-3 days. The child's vital signs in the emergency room were stable. In the physical examination of the child without fever, there was widespread rebound in the right lower and upper quadrants of the abdomen. Thereupon, blood, biochemistry and urine tests were requested. WBC 12.33, CRP 3.44, ALT 11, AST 31, total bilirubin 0.40, GGT 18, creatinine 0.26, and no obvious pathology was detected in the laboratory tests performed. However, the patient was started on symptomatic treatment. Computed tomography was performed to detect acute intra-abdominal pathology for the patient who was not relieved by the treatment. We encountered a very surprising result for emergency physicians. Millimetric stones in the gallbladder of a 3-year-old male patient were not very common. Upon this situation, the patient was consulted to the pediatric surgeon. Since the bilirubin and LFT values of the patient were within the normal range, it was observed that he was relieved after the analgesic treatment. Our patient was discharged from the emergency room with the recommendation of pediatric surgery outpatient clinic control.



Figure 1. The image of the patient's gallbladder on computed tomography

Discussion

There are not enough studies yet on gallstones in the pediatric age group compared to adults. Despite this, the incidence of childhood gallbladder diseases has been significantly increased in the last 20 years. It is seen as the most prominent factor in this increase due to the widespread use of ultrasonography, especially in emergency services. The uneasiness it creates in children and the low pain threshold have become an important health problem (1). Studies have shown that risk factors for gallbladder in children include female gender, genetics, hemolytic diseases, hepatobiliary diseases, cystic fibrosis, cholestasis, total parenteral nutrition, hypothyroidism, use of certain drugs such as infection, ileal disease or ileal resection, hyperlipidemia, diabetes cephalosporins and obesity have been reported. (2, 3).

The treatment of gallstones in children is still controversial. The treatment of gallstones diagnosed as asymptomatic is not clear. In such cases, the wait-see approach is prioritized. Despite this, cholecystectomy is recommended for patients with hemolytic disease, even if they are asymptomatic(4).

In studies, it has been observed that millimetric gallstones are poured out of the bile ducts in children compared to adults, and therefore cause pancreatitis in children (5). Although rare, cholelithiasis should be kept in mind by emergency physicians in children who come to the emergency department with the complaint of abdominal pain, and their approach should be directed towards this. At the same time, more studies are needed to eliminate the deficiencies related to gallbladder stone management and treatment in children.

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