



Cecocolic intussusception in a patient with a cecal duplication cyst

To the Editor,

Intussusception is a common gastrointestinal emergency in the pediatric population. This illness is a conversion in which a portion of the intestine invaginates into another adjacent distal segment of the intestine and causes bowel and ileocolic obstruction. Intussusception is considered a frequent cause of abdominal pain in pediatric patients. Most diagnosed intussusceptions are ileocolic. With early and correct detection, the mortality rates are <1%. However, if left untreated, this condition is uniformly mortal. In nearly 2%–12% of the patients, a surgical lead point can be determined (e.g., Meckel diverticulum, mesenteric lymph node, intestinal tumors, polyps, ganglioneuroma, hamartomas, or mesenteric or duplication cysts) (1,2). Duplication cysts are a rare congenital anomaly of the gastrointestinal tract. Duplication cysts may also sometimes act as the lead point for intussusception. A common location of these cysts is the ileum. However, ileocecal duplications are very rare. The clinical and radiological signs may mimic those of intussusception, which is more common intussusception. Hence, diagnosis can generally be established only by surgical assessment (3,4). Here we demonstrate a case of cecocolic intussusception with a cecal duplication cyst.

A 4-year-old boy was referred with abdominal pain for 3 weeks. The vital findings were normal; abdominal tenderness and rebound were observed in the right lower quadrant. We did not determine any mental disorder. Biochemical analysis revealed the following: hemoglobin level, 13.4 g/dL; hematocrit, 40.6%; and white blood cell count, 15.876 cells/ μ L. No unusual findings were observed on the remaining biochemical analysis. Ultrasonography revealed a lesion similar to intussusception in the right upper quadrant of the abdomen (Figure 1). Because we suspected the presence of leading point or obstruction, we performed computed tomography (CT) with contrast media. CT showed intussusception



Figure 1. Cecocolic intussusception on ultrasonography.

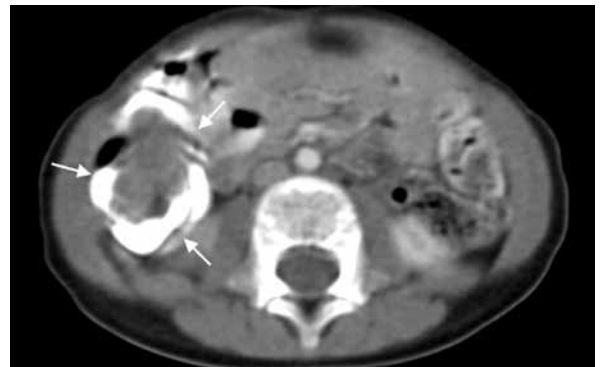


Figure 2. Intussusception and cecal duplication cyst at the right upper quadrant of the abdomen on the axial contrast-enhanced CT (Arrows: Cyst and Intussusception).

and a cystic lesion measuring 5 cm in size in the lumen of the ascending colon (Figure 2,3). We concluded that the cause of intussusception was a cystic lesion. This cystic lesion was confirmed by intraoperative examination. Cecocolic intussusception with a cecal duplication

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Figure 3. Intussusception and cecal duplication cyst at the right upper quadrant of the abdomen on coronal contrast-enhanced CT (Arrows: Cyst and Intussusception).

cyst was found, it was removed, and ileocolic anastomosis was performed on surgery. Histopathological analysis of the lesion was consistent with a cecal duplication cyst without any aberrant mucosa.

The prognosis in patients with intussusception is excellent if the condition is diagnosed and treated early; otherwise, severe complications and death may occur. In children, ultrasonography is generally used as the first imaging modality because of its high diagnostic sensitivity and absence of ionizing radiation. However, CT is generally preferred in adults. Immediate treatment and surgical approach are required to prevent intestinal ischemia and necrosis (1-5).

Colic intussusception and gastrointestinal duplications can be symptomatic in the first 2 years of life. A characteristic location of intussusception is the ileocecal area; gastrointestinal duplications generally occur in the ileal segments. Gastrointestinal duplications are rare congenital disorders that generally occur below 2 years of age in most patients. Ileal duplication is a frequent type of gastrointestinal duplication. Colic duplication is either cystic (>80% of cases) or tubular and occurs in 10%–15% of patients (6,7). Symptomatic colonic duplication is uncommon in adults. The frequent clinical symptoms and findings are pain and intestinal obstruction (5,6). These symptoms may occur as acute, subacute, or chronic manifestation. CT has high diagnostic accuracy rates. Intussusception may exhibit a pathognomonic presence of soft tissue volume, ensuing outer intussusceptions and central intussusception. When the CT radi-

ate is parallel to the longitudinal axis of the intussusception, it is observed as a “sausage-shaped” mass; when the radiate is perpendicular to its axis, it is observed as a “target-shaped” mass (6).

Various surgical procedures have been used for treating cecal duplication cysts. The preferred treatment is resection of the duplication and its attached normal colon (8,9). In our case, the duplication cyst was removed and ileocolic anastomosis was preferred.

In conclusion, cecal duplication cyst should be considered, particularly in patients with intussusception. Because of similar presenting symptoms, it may be misdiagnosed as the more commonly occurring problem of intussusception in pediatric patients.

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