

Ultrasound Diagnosis of Burkitt Lymphoma Presenting as Ileo-colic Intussusception: A Case Report

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Introduction

Idiopathic ileo-colic intussusception is a frequent cause of abdominal pain in children less than 5-years of age. Ileo-colic intussusception occurring in adolescents should raise the suspicion for the presence of a pathological lead point which rarely may be due to Burkitt lymphoma. We present a case of a 15-year old boy where the diagnosis of Burkitt lymphoma was suspected on the initial ultrasound. The objective of this case report is to highlight the ultrasound findings that led to the early diagnosis of Burkitt lymphoma which positively impacted the management and prognosis of this patient.

Case Report

Patient details: 15-year old boy with no previous medical history
Clinical history: frequency of abdominal colic over 4 months.
Physical findings: Mass detected in the epigastric region.

Investigations

Figure 1: AXR

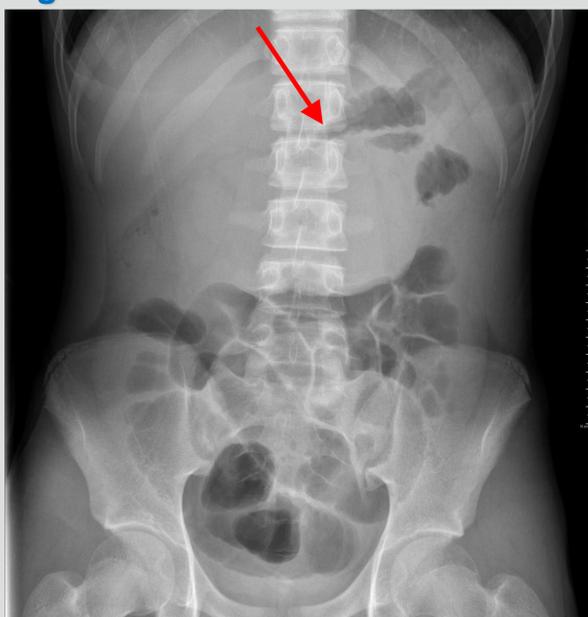


Figure 1: AXR shows the presence of a soft tissue mass in the epigastric region (arrow).

Figure 2: Ultrasound

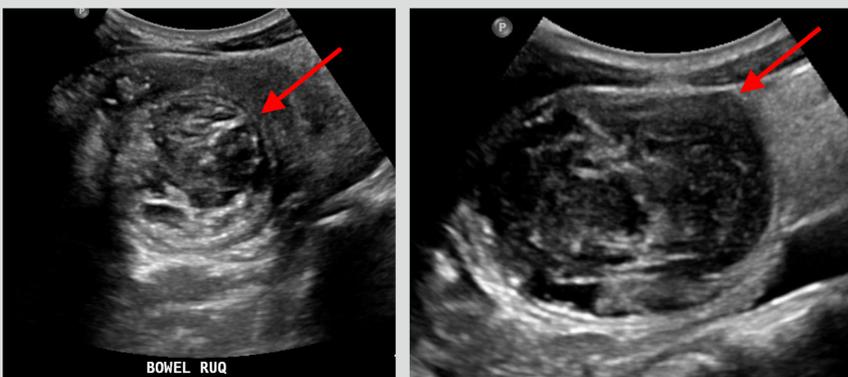


Figure 2a: US shows the presence of an intussusception (arrow) in the right upper quadrant of the abdomen corresponding to the mass seen on the AXR.

Figure 2b: A hypoechoic mass is seen within the intussusception (arrow).



Figure 2c: US shows the presence of a stalk leading to the mass within the intussusception (arrow).

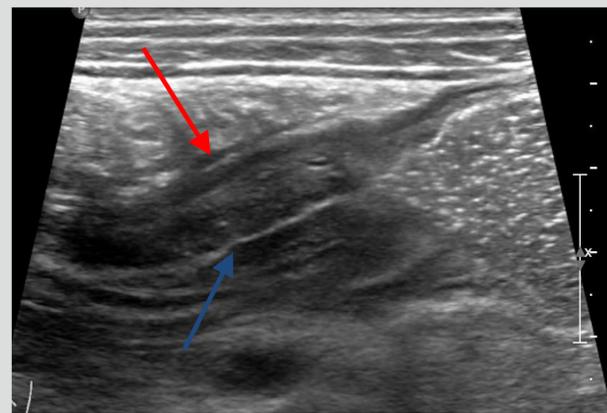


Figure 2d: Bowel wall thickening is seen in the bowel loops in the right side of the abdomen suspicious for bowel lymphoma (red arrow). The echogenic line is the bowel lumen (blue arrow)

Figure 3: CT Abdomen

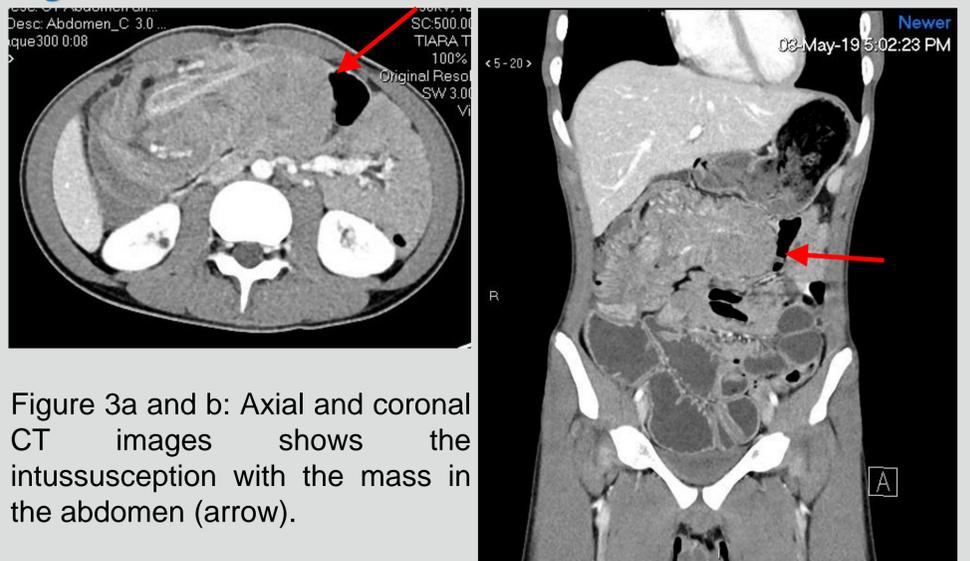


Figure 3a and b: Axial and coronal CT images show the intussusception with the mass in the abdomen (arrow).

Learning points

1. Ileo-colic intussusception occurs most commonly in infants and young children.
2. Ileo-colic intussusception occurring in adolescents are uncommon and are usually caused by a pathological lead point.
3. Causes of pathological lead points include Meckel's diverticulum, a polyp, duplication cyst, lymph nodes and other masses such as Burkitt lymphoma
4. In this case, in addition to the mass seen in the intussusception, diffuse bowel wall thickening was also seen in the bowel loops suspicious for lymphomatous infiltration.
5. This constellation of findings led to the early suspicion and subsequent diagnosis of Burkitt lymphoma. Early treatment was implemented and the patient recovered.
6. This case report highlights the ultrasound findings that led to the early diagnosis of Burkitt lymphoma which positively impacted the management of this patient