Swirling Fat

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Submissions for the Image of the Month should include high-quality TIF endoscopic images of unusual or informative findings. In addition, 1 or 2 other associated photographs, such as radiological or pathological images, can be submitted. A brief description of no more than 200 words should accompany the images. Submissions are to be made online at www.jpyn.org, and will undergo peer review by members of the NASPGHAN Endoscopy and Procedures Committee, as well as by the Journal.

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A previously healthy six-year old male was admitted with right lower quadrant (RLQ) pain and fever concerning for acute appendicitis. He had no other associated complaints. Physical examination was significant for tender RLQ, and voluntary guarding. No masses were palpated. The initial comprehensive metabolic panel and complete blood count were unremarkable and sedimentation rate was borderline increased at 17mm/hr. Computerized tomography (CT) scan of the abdomen showed normal appearance of appendix but swirl-like inflammatory fat stranding in the RLQ, thus suggesting the diagnosis of omental infarction (OI). He improved on intravenous antibiotics and supportive care, and was, discharged home five days later.

Omentum is a fat laden peritoneal remnant of embryological development. OI is a rare cause of acute abdomen in children and may mimic acute appendicitis, a common entity in childhood [1, 2]. Obesity is a known risk factor for OI [3]. The “swirling” appearance on the CT scan is considered diagnostic for OI. A trial of supportive medical management and antibiotics should be considered prior to surgery [4]. This case is instructive as obesity is a risk factor for OI and in keeping with pediatric obesity epidemic, incidence of OI is increasing [4].


The upper arrow shows inflamed, infected adipose tissue ("well sign") and the lower arrow shows normal adipose tissue.