

Case Report

Gohary's Phenomenon

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Abstract

Gohary's phenomenon is a new phenomenon manifested by severe abdominal click that warrant urgent attention and is diagnosed wrongly upon ultrasound findings as a case of intussusception. The symptoms is caused by simple faecal impaction of the terminal ileum and caecum and can be managed by fleet or gastrografin enema.

Introduction

In 1981 we reported a case of severe abdominal colic diagnosed clinically and radiologically as intussusception, but proved during exploration to be a case of impacted cecal fecalith [1]. This has prompted us to look for the possibility of similar pathology in all cases presented with clinical and radiological signs suggestive of intussusception. We have encountered sporadic cases over the last 35 years but were not documented. We started documenting the clinical and radiological findings of this phenomenon over the last 6 years.

Material and Methods

Between 2009 and 2016 we encountered 17 children aged 9 months to 10 years who presented with severe abdominal pain associated with agonized screaming. Four patients were under the age of 1 year, 9 between 1 and 2 years and 4 between 2 and 10 years. The pain is colicky in nature, periumbilical, not radiating and of acute onset. The pain was not associated with vomiting and no stool passed 24 to 48 hours prior to the symptoms. These attacks tend to stop abruptly to recur after minutes or hours with same intensity. The pain does not respond to pain killers or antispasmodics. Abdominal examination is difficult during the attack but soft in between. Rectal examination showed empty rectum in 12 cases, of those there was fresh bleeding on the examining finger in 2 patients and in 5 patients there was trace of hard stool in the rectum.

Plain X ray was done in 5 patients and showed fecal matters at the caecum and ascending colon (Figure 1). Ultrasonography (US) demonstrated a mass in the right iliac fossa which is reported in all cases as a case of intussusception. Attempt at reducing the mass with barium (2 patients), gastrografin (5 patients) or saline (3 patients) failed to show efflux of the material into terminal ileum. Invagination of the terminal ileum into the cecum gives the impression of incomplete reduction (Figure 2). This would in normal situations necessitate operative reduction, but with previous experience, all these cases were managed conservatively either by fleet or repeated gastrografin enemas with passage of hard stool and disappearance of the symptoms.

We have not used any radiological material for reduction during the last 2 years as the diagnosis was obvious on clinical and US findings.

Discussion

Abdominal pain and/or colic are common symptoms in the paediatric age group, the causes of which depend on age and associated

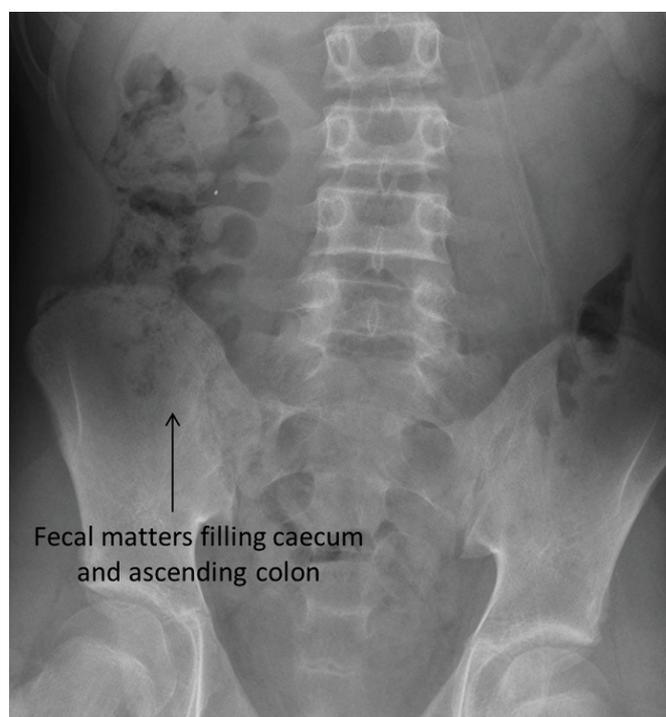


Figure 1: Plain X ray of abdomen showing stool at the Right side of the colon.

symptoms. Constipation is known to be associated with abdominal pain, but has not been known to be severe enough to warrant urgent attention [2-4].

Ultrasonography in patient with abdominal colic is the primary investigation and when the classical target sign appears the primary diagnosis is acute intussusception. But looking closely into the images that coined with Gohary's phenomenon, there are significant and important differences.

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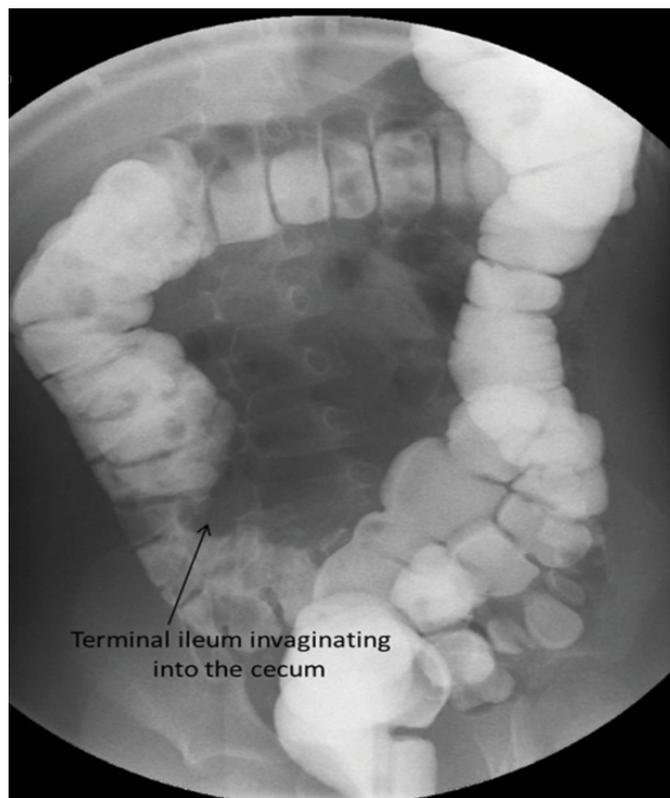


Figure 2: Invagination of the terminal ileum into the caecum.

1. The site of ileo colic intussusception is not the right iliac fossa but the right hypochondrial region. In fact, the right iliac fossa in classic intussusception is empty (Figure 3,4)

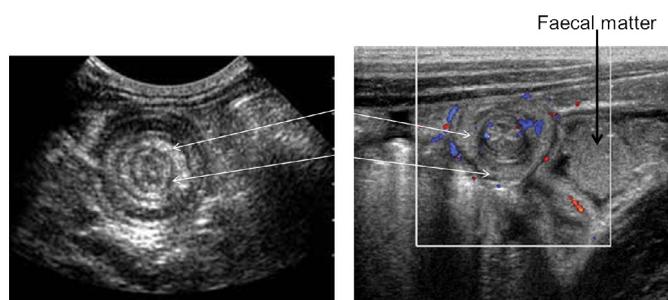
2. There is always associated hard stool in the small bowel near the pathological findings (Figure 5)

3. The lesion diagnosed as intussusception is in fact impacted stool at terminal ileum.

The question is, with these significant differences why all cases reported categorically by radiologist as cases of intussusception?! The answer to that comes from the dictum (the eyes does not see what the brain does not know). Radiologists are not aware of the new phenomenon (Gohary's) so they link the findings to what they know previously which is intussusception [5].

Conclusion

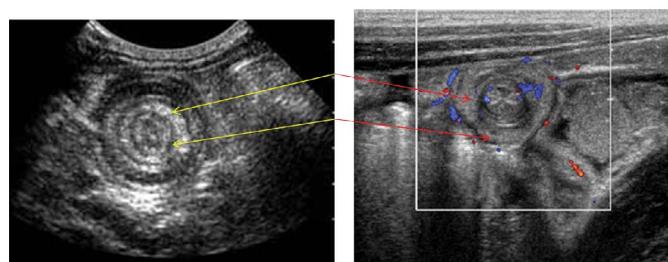
We would like to attract attention towards a new phenomenon that presents with severe abdominal colic mimicking intussusception on US findings and is caused by simple faecal impaction of the



Classic intussusception

Gohary's phenomenon

Figure 4: Difference between classic intussusception and Gohary's phenomenon.



Classic intussusception

Gohary's phenomenon

Figure 5: hard stool in the small bowel near the pathological findings.

terminal ileum and caecum. Thus, avoiding unnecessary radiological investigations and unnecessary surgery.

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Classic intussusception



Gohary's phenomenon

Figure 3: Difference between classic intussusception and Gohary's phenomenon.