

Introduction

Acute appendicitis is one of the most common surgical emergencies worldwide, affecting nearly 7% of the world's population. In the pediatric population, it most commonly affects older children ages 10-20 and is very rarely seen in children less than 2 years old. Appendicoliths can often precipitate acute appendicitis in pediatric populations. The significance of appendicolith size as a factor in triggering acute appendicitis and their relationship to severity of symptoms remains uncertain.

Case

- A 9 year old male with no significant PMH presented to Kern Medical ED for acute right lower quadrant abdominal pain, which he said was worsening for 1 day. He reported associated fever, nausea with 3 episodes of vomiting, loss of appetite, and denied any change in bowel habits. The pain was described as achy in nature, graded as 8/10. The patient stated that his pain was aggravated by any movement and unrelieved by rest. On physical examination patient was in moderate distress secondary to pain and abdominal examination revealed hypoactive bowel sounds, soft and non-distended abdomen with tenderness to deep palpation in the RLQ. Positive Mcburney's point tenderness, Rovsing's sign, rebound tenderness and obturator sign. Laboratories revealed a leukocytosis of 13. CT images revealed a large appendicolith measuring 1.6cm in diameter. The patient was admitted to general surgery and underwent an uncomplicated laparoscopic appendectomy. His post operative course was unremarkable, and the patient was able to be discharged home the following day.

Figures



Figure 1: Computed tomography axial scan showing 1.6cm appendicolith



Figure 2: Computed tomography coronal scan showing 1.6cm appendicolith



Figure 3: Computed tomography sagittal scan showing 1.6cm appendicolith

DISCUSSION

We present the case of uncomplicated appendicitis in a pediatric patient in attempt to better understand the significance of appendicolith size in acute appendicitis. Although appendicoliths often precipitate acute appendicitis, most patients with appendicoliths remain asymptomatic. In adult patients, a giant appendicolith is described as those measuring over 2 cm, and are extremely rare. Minimal literature exists describing giant appendicolith in the pediatric population. A study by Jabra et al. studying appendicoliths in children using CT scans, showed that when associated with abdominal pain there is a 90% probability of acute appendicitis in these patients as well as increased risk of appendiceal perforation.

Conclusions

Only 3 cases of giant appendicoliths (>2 cm) exist in literature, none of which were found in children. Of documented appendicoliths in children, mean diameter measured at 5.21 +/- 2.34 mm. Compared to this mean, our patient presented with an unusually larger appendicolith, measuring at 1.6 cm. No literature exists to define a giant appendicolith in the pediatric population, prompting an area for further investigation.

References

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