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CASE REPORT | COLON

Appendiceal Fecalith Presenting as a Submucosal Cecal Polyp Removed During Colonoscopy

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ABSTRACT

Appendiceal fecaliths, also known as stercoliths or coproliths, are rigid masses comprised of fecal material that become lodged within the appendix. They are generally accepted to be a primary etiologic agent of acute appendicitis and appendiceal intussusception in adults. We report a case of an asymptomatic woman undergoing colonoscopy found to have a submucosal appearing mass below the appendiceal orifice. A neoplastic appearing lesion on the orifice of the appendix was resected, after which a fecalith extruded into the colonic lumen. This is the first reported case of appendiceal fecalith discovered and completely removed during colonoscopy in an asymptomatic patient.

KEYWORDS: appendix, fecalith, colonoscopy, endoscopy, cancer screening

INTRODUCTION

Only a handful of case reports have described appendiceal fecaliths presenting as submucosal tumors.[1–6] Other reports have described appendiceal fecaliths discovered after surgical or endoscopic resections in symptomatic patients.[7–11] They are usually misidentified initially as a submucosal cecal or appendiceal tumor on the abdominal computed tomography scan or during colonoscopy and diagnosed as a fecalith postoperatively after resection due to concern for possible malignancy.[1,2,10] Appendiceal fecaliths are associated with acute appendicitis, intussusception of the appendix, or chronic right lower quadrant abdominal pain. Few reports have been made of asymptomatic patients diagnosed with appendiceal fecaliths during colonoscopy. To our knowledge, this is the only reported case of initial discovery and complete endoscopic liberation of an incidentally detected appendiceal fecalith in an asymptomatic patient presenting as submucosal mass during a colonoscopy.

CASE REPORT

A 43-year-old asymptomatic woman with Lynch syndrome but no personal history of cancer underwent surveillance endoscopy. Colonoscopy revealed a 5 mm transverse colon polyp and a polypoid appendiceal orifice concerning for a possible submucosal mass. On close examination of the surface of the appendiceal orifice, a 2 mm area with a neoplastic appearance was seen (Figure 1). Cold forceps were used to resect the neoplastic appearing focal lesion on the surface of the appendiceal orifice. After resection of the lesion, a pale mass suspicious for a fecalith was noted in the appendix (Figure 1) and eventually extruded from the appendiceal orifice into the colonic lumen (Figure 1). Pathology from the mass revealed acellular and calcified material, consistent with the clinical impression of a fecalith (Figure 2). Histology of the lesion on the appendiceal orifice revealed hyperplastic changes (Figure 2).

DISCUSSION

The differential diagnosis for submucosal masses found below the cecum or appendiceal orifice is broad and includes lipomas, appendiceal carcinomas, neuroendocrine tumors, lymphoma, abscess, and mucocele.[12,13] Although appendiceal fecaliths are relatively

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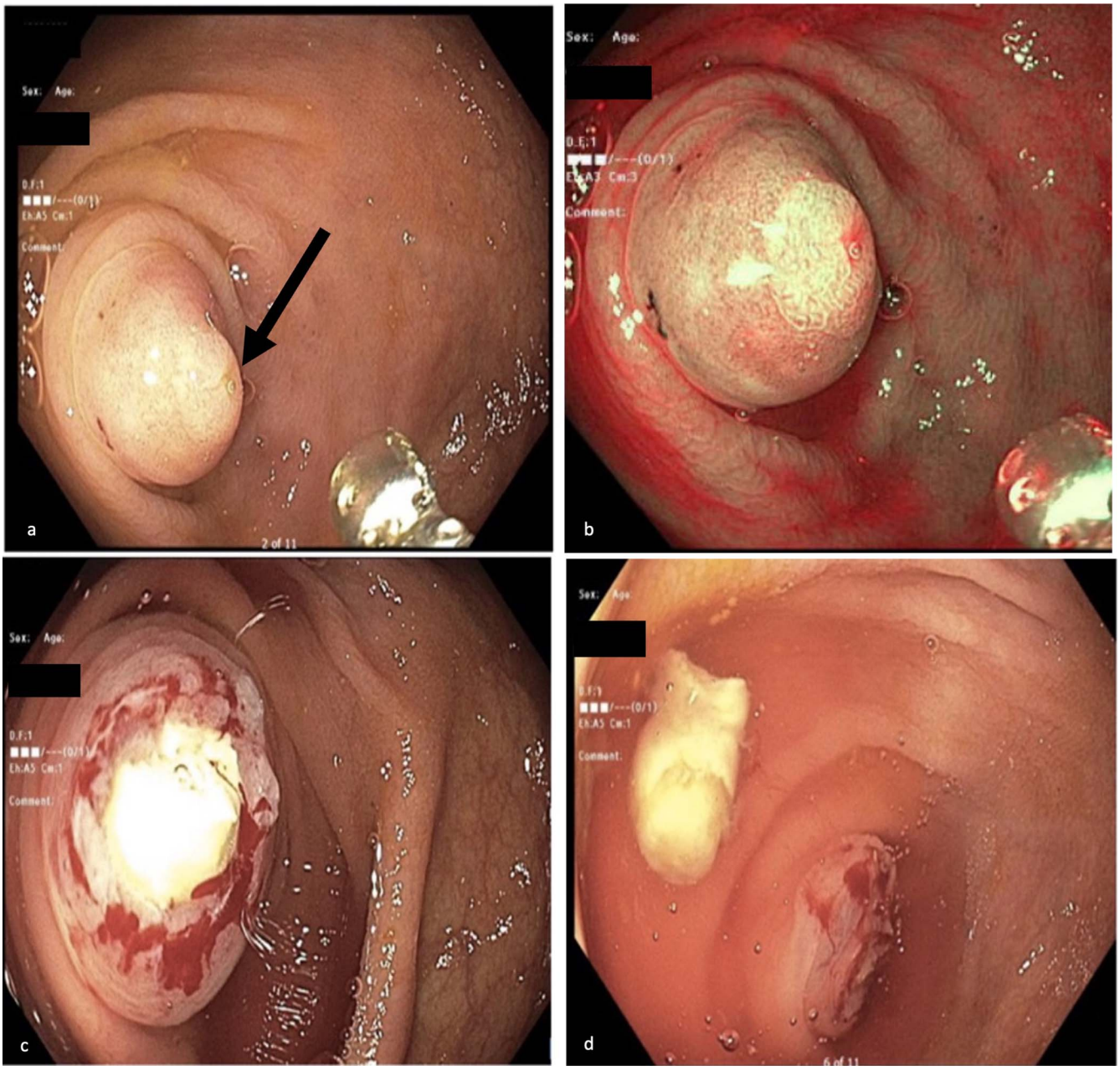

Figure 1. (A) Protuberant appendiceal orifice concerning for appendiceal or submucosal tumor with a 2 mm neoplastic appearing area (arrow). (B) Narrow-band imaging with a tubular appearing pit pattern on the surface of appendiceal orifice. (C) Unroofing of the appendiceal orifice after endoscopic resection of polyp with visualization of fecalith. (D) Fully dislodged fecalith with decompression of submucosal appearing mass beneath the appendiceal orifice.

common, asymptomatic fecaliths encountered and resected endoscopically are rarely reported. Appendiceal fecaliths are often initially misdiagnosed, and patients may undergo expensive and invasive testing including colectomies to ultimately receive the diagnosis of an appendiceal fecalith. This case represents the presentation of an asymptomatic appendiceal fecalith mimicking a submucosal tumor, which was endoscopically removed before causing a possible complication such as appendicitis or intussusception. Appendiceal fecaliths should be considered in the differential diagnosis of cecal submucosal or appendiceal masses discovered during colonoscopy.

DISCLOSURES

Author contributions: Drafting of manuscript: K. Payne, N. Farha, CA Burke. Acquisition of patient data: K. Payne, N. Farha, E. Savage, CA Burke. Critical revision: K. Payne, N. Farha, CA Burke. CA Burke is the article guarantor.

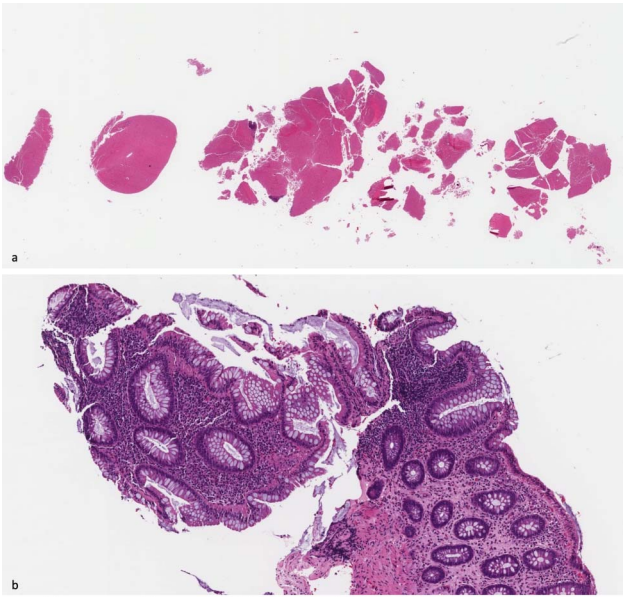

Figure 2. (A) Appendiceal fecalith (H&E, 7× magnification, inset 200× magnification) and (B) appendiceal orifice mucosa (H&E, 100× magnification) with hyperplastic epithelial changes. H&E, hematoxylin and eosin.

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