An unusual complication: postcolonoscopy appendicitis

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A 50-year-old man presented to our hospital with rectal bleeding, hypogastric abdominal pain, and weight loss. Physical examination revealed only mild left lower quadrant tenderness and scant fresh blood on rectal examination. Laboratory evaluation was unremarkable. A colonoscopy was performed after polyethylene glycol preparation, and this revealed internal hemorrhoids and three diminutive polyps: one near the appendiceal orifice in the cecum (**Figure 1**), one in the descending colon, and one in the rectum. All the polyps were resected by excisional cold-forceps biopsy.

After colonoscopy the patient developed acute right-sided abdominal pain. Plain radiographic films did not show free intraperitoneal air. He developed leukocytosis and right lower quadrant guarding, and we started him on empiric antibiotic treatment. An abdominal/pelvic computed tomographic scan revealed appendicitis. The patient underwent laparoscopic appendectomy of a markedly inflamed appendix.

Postcolonoscopy appendicitis is a rare complication. A recent review of the literature reported eleven cases, with symptoms developing 12 hours to 5 days afer the procedure [1]. Acute appendicitis has been diagnosed incidentally during colonoscopy. Endoscopic findings can include an erythematous, edematous appendiceal orifice, possibly with pus extrusion and inflammation nearby [2,3]. Hypotheses that have been proposed to explain colonoscopy-induced appendicitis include: (a) the forcing of fecal contents into the appendix by air insufflation; (b) the aggravation of pre-existing inflammation by endoscopic manipulation and insufflation; and (c) trauma-induced edema and appendiceal obstruction resulting from endoscopic interventions performed in the cecum. Other hypotheses include over-insufflation causing barotrauma, and accidental intubation of the appendix [4,5]. The cases reported in the literature have followed both colonoscopies with interventions and colonoscopies without interventions. In our case the cecum and appendiceal orifice appeared normal. The cold-forceps biopsy of the polyp near the appendiceal orifice might have caused edema, obstruction of the appendiceal lumen, and subsequent appendicitis. The onset of symptoms after the procedure indicated that this was colonoscopy-induced appendicitis. Although a rare complication, clinicians should consider postcolonoscopy appendicitis in a patient with postprocedure abdominal pain. Early recognition allows for prompt treatment.

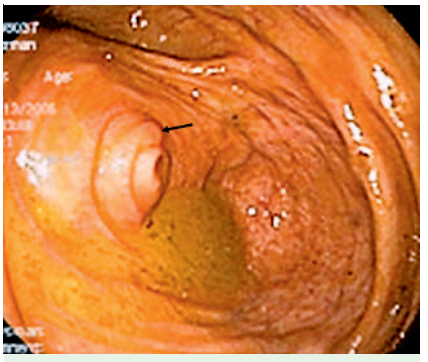

Figure 1 Colonoscopic view of the diminutive cecal polyp observed near the appendiceal orifice.

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