

## SHORT REPORT

# Benign Solitary Colonic Ulceration Mimicking Lipoma of the Colon

Murat ACAR<sup>1</sup>, Osman Nuri DİLEK<sup>2</sup>, Fatma Hüsnüye DİLEK<sup>3</sup>, Dursun Ali ŞAHİN<sup>2</sup>, İhsan USLAN<sup>4</sup>

<sup>1</sup>Department of Radiology, Faculty of Medicine, Afyon Kocatepe University, Afyon - Turkey

<sup>2</sup>Department of Surgery, Faculty of Medicine, Afyon Kocatepe University, Afyon - Turkey

<sup>3</sup>Department of Pathology, Faculty of Medicine, Afyon Kocatepe University, Afyon - Turkey

<sup>4</sup>Department of Internal Medicine, Faculty of Medicine, Afyon Kocatepe University, Afyon - Turkey

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Benign solitary colonic ulcer is an uncommon lesion that is not due to any inflammatory disease, specific organism, foreign body granuloma, arteritis or major vessel thrombosis (1). The etiology remains unknown, and there are no pathognomonic lesions or symptoms (2). It is usually diagnosed during laparotomy, but for uncomplicated cases, colonoscopy is the best diagnostic method (3). Here we present a case of solitary colonic ulcer, located at the transverse colon, mimicking colonic lipoma with computed tomography (CT) examination.

### Case Report

A 51-year-old woman presented with nonspecific abdominal pain and diarrhea during the preceding three months period. She was otherwise asymptomatic and had no history or clinical evidence of significant illness. There was no history of operation. She did not drink alcohol or use nonsteroidal anti-inflammatory drugs. Examination of the abdomen revealed tenderness on palpation, especially localized around the umbilicus. Laboratory investigations revealed a mild anemia; Hgb (10.9 g/dl), Hct (38.9%), MCV (77.4 fl), and MCH (25.6 pg). Routine biochemical values including fasting blood glucose, blood urea nitrogen, serum electrolytes were in normal ranges. Body temperature (36.5 °C), pulse rate (84 beats per minute) and blood pressure (130/80 mmHg) were normal.

Ultrasonographic examination revealed a 3 cm diameter mass which was isoechoic with mesenteric fatty tissue at the localization of transverse colon. CT scan also demonstrated a sharply marginated, round lipomatous mass in the middle transverse colon (Figure 1. A-E). Endoscopic examination revealed an ulcerated nodular appearance narrowing the lumen. On biopsy, there was fibrotic, necrotic granulation tissue with underlying inflammatory cells.

Although there was no mass in the transverse colon, a nonperforated 1 cm diameter ulcer encased by the mesenteric fatty tissue was detected at operation. A solitary non-specific ulcer of the transverse colon was successfully treated by surgery. Histopathologic examination of specimen showed an ulcer extending to all layers of the colon. Ulcer margins were sharply demarcated and hyaline thrombi were observed in vessels of the ulcer floor. Colonic mucosa adjacent to the ulcer showed mild nonspecific inflammatory changes (Figure 1. F).

Solitary colonic ulcers are rare pathologic conditions that involve different segments of the colon. The etiology of this condition remains obscure. The usual location of the ulcers is the cecum and ascending colon (67%), then transverse, hepatic, and splenic flexures (18%), and descending and sigmoid colon (15%). Nonspecific colon

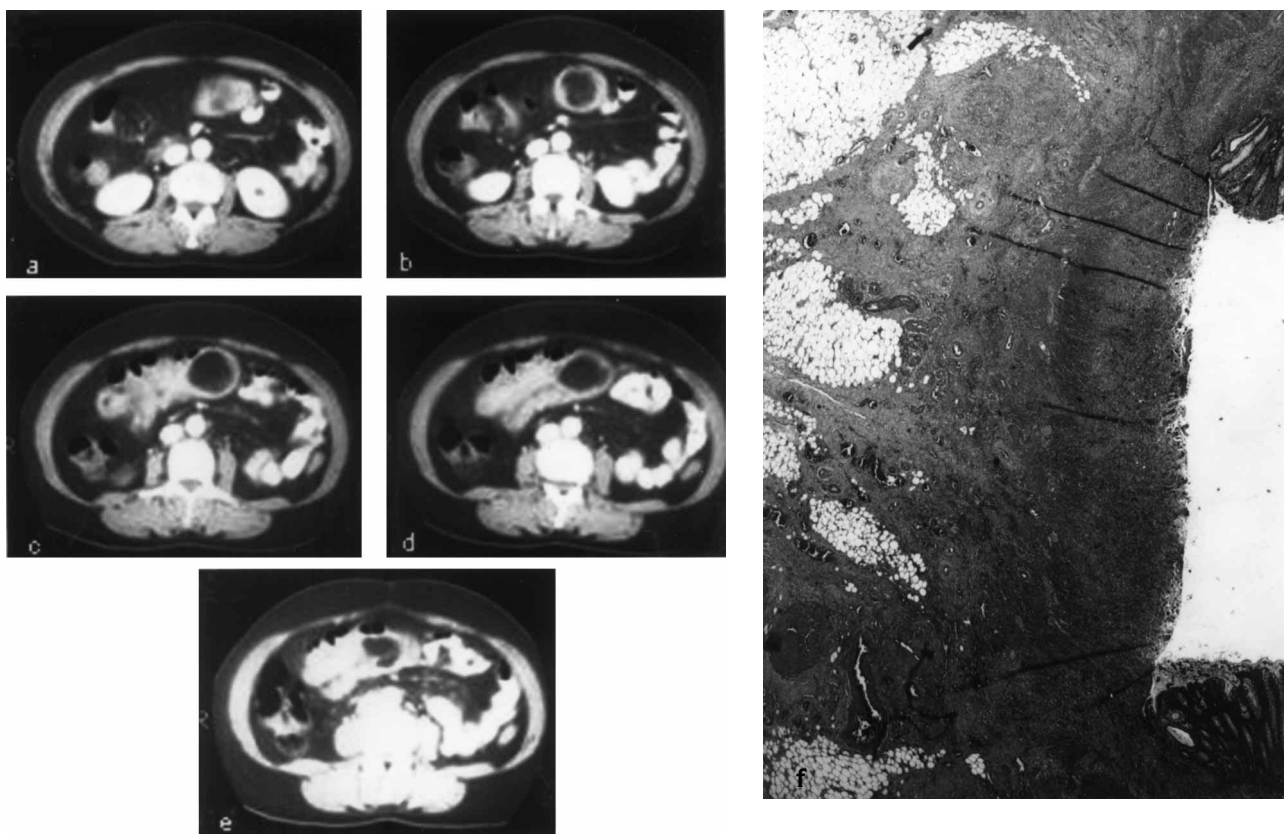


Figure 1. A 51-year-old woman with nonspecific abdominal pain and diarrhea.  
 A-E, Contrast-enhanced CT scans of the abdomen show ulcer encased by the mesenteric fatty tissue mimicking colonic lipoma in the middle transverse colon  
 F, Photomicrograph of specimen shows the ulcer extended to all layers of the colon. Mesenteric fatty tissues are shown posterior to the granulation tissue.

ulcers occur in all age groups, predominantly 40 to 60 years, with a slight predilection to the female sex. The clinical manifestations include abdominal pain mimicking appendicitis especially localized at the right hemicolon, lower gastrointestinal hemorrhage, perforation, and abdominal mass (3,4). If a solitary colonic ulcer is diagnosed preoperatively, periodic colonoscopic examination would be sufficient, but in complicated situations, urgent laparotomy is indicated (3).

The main conventional imaging techniques of colon are barium enema and colonoscopy. Barium enema is often the first tool employed to obtain a diagnosis mainly due to the widely held belief that barium contrast studies of the large bowel offer a rapid and reasonably accurate method for diagnosis of colonic disorders. The standard study involves the double contrast technique, where mucosal definition is enhanced by insufflation of air

together with barium. Conventional CT scanning is limited in luminal colonic imaging because it collects axial sections only. Nonetheless it does show bowel wall thickening, extraluminal disease and involvement of adjacent structures (5). In our case, ultrasonographic examination revealed a mass which was isoechoic with mesenteric fatty tissue. In the CT examination, we could not detect an ulcer but a sharply marginated, round lipomatous mass secondary to protruded mesenteric fatty tissue through the ulcer in the middle transverse colon was demonstrated.

Lipoma is the most common benign nonepithelial tumor of the colon (6). Colonic lipomas range in size from 2 mm to 30 cm. They can cause symptoms when the size exceeds 2 cm, including bleeding with anemia, constipation, change in bowel habits, abdominal pain, intestinal obstruction and rarely intussusception.

Preoperative diagnosis of colonic lipomas is difficult because they can be mistaken for benign or malignant colonic tumors. CT has been proposed as a noninvasive method of diagnosis. Lipomas appear spherical or ovoid with sharp margins and absorption densities of -40 to -120 Housfield units typical of the fatty composition (7). In our case, the lesion was ovoid with a sharp margin and had fatty composition density on CT examination.

It is known that intraoperative or radiographic findings of solitary colonic ulcer may mimic colonic carcinoma. In addition, we suggest that chronic colonic

ulcers may have a false colonic lipoma like appearance on CT examination.

*Corresponding author:*

*Murat ACAR*

*Department of Radiology,*

*Faculty of Medicine,*

*Afyon Kocatepe University,*

*03200 Afyon - Turkey*

*E-mail: drmacar@hotmail.com*

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