

A Minute Erosion Representing Leukemic Infiltration in the Colon

A previously healthy 41-year-old man was admitted to our hospital with persistent non-bloody diarrhea. The laboratory values were hematocrit 38.3%, platelets 385,000/mm³, white blood cell count 10,600/mm³ without blasts, C-reactive protein 3.8 mg/dl, and lactate dehydrogenase 278 IU/l. Total colonoscopy showed a normal mucosal surface, except for a minute erosion in the sigmoid colon (Figure 1). A biopsy specimen of the erosion showed that the lamina propria was occupied by a dense cellular infiltrate of monomorphic atypical cells with irregular nuclei and scanty cytoplasm, which was consistent with mucosal leukemic infiltration. Bone-marrow aspiration showed hypercellularity with many immature monocytic forms, and positive leukemic antigens consistent with acute monocytic leukemia. A therapeutic regimen was immediately started. A repeat colonoscopy showed that the sigmoid colon had irregularly shaped nodules (Figure 2). Biopsy specimens of the sigmoid colon also showed diffuse leukemic infiltration. Four months after admission, the patient died of subarachnoid and cerebral hemorrhage due to central nervous system involvement.

The incidence of leukemic infiltration into the gastrointestinal tract is increasing, due to improved treatment methods and

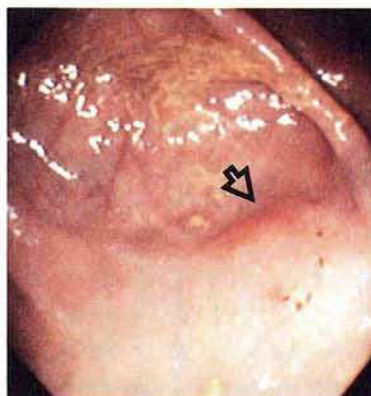


Figure 1: Colonoscopy, discloses a minute erosion in the sigmoid colon (arrow).

prolonged survival (1). Several kinds of gastrointestinal lesion, such as leukemic infiltrates, various infections, bleeding, and necrosis are present simultaneously in the terminal stage of leukemia (2,3). However, leukemic lesions in the early stage have

not previously been reported in the literature (4,5). The present case indicates that leukemic invasion can occur as a minute erosion of the colonic mucosa, followed by infiltration of the entire wall, with a minute erosion representing the early stage of leukemic involvement in the gastrointestinal tract. Awareness of this association will expedite the diagnosis.

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Figure 2: A repeat colonoscopy shows that the sigmoid colon has pale, edematous mucosa with petechiae and irregularly shaped nodules, and is lacking in distensibility.

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