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A Differential Diagnosis of Unusual Gastric Ulcer

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Abstract: The endoscopic findings of diffuse large B cell lymphoma have various presentations. In our case, the patient had developed multiple elevated central ulceration lesions, and the peripheral elevated portion had a heaped-up margin. The margin had a sharp, smooth edge that was not infiltrative and could be confused with a simple gastric ulcer. Endoscopists should be aware of the possibility of multiple lymphoma ulcers with heaped-up margins. We present some unusual endoscopic features of lymphoma, which are easily misdiagnosed as gastric ulcers.

Keywords: gastric ulcer; diffuse large B cell lymphoma (DLBCL); endoscopy

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A 61-year-old man visited the hospital for evaluation of persistent epigastric pain and postprandial discomfort for 4 months. He had undergone an upper endoscopy at another institution 3 months earlier and was diagnosed with a gastric ulcer. He was treated with medication, but the symptoms persisted. In our hospital, complete blood count (CBC) revealed a hemoglobin level of 6.2 g/dL, hematocrit of 21.4%, white blood cell (WBC) count of 5750 × 103/μL, and platelet count of 223 × 103/μL. The serum laboratory test results were as follows: aspartate transaminase (AST), 62 U/L; alanine transaminase (ALT), 32 U/L; alkaline phosphatase (ALP), 152 U/L; and lactate dehydrogenase (LDH), 563 U/L. Upper endoscopy revealed multiple gastric ulcers without active bleeding in the antrum. The ulcers had elevated round margins and varied in diameter from 3 to 6 mm; their base was covered with exudate (Figure 1).

A biopsy of the gastric ulcer lesion revealed dense atypical lymphoid cell infiltration with ulcerations (Figure 2a). The immunohistochemistry results were CD20-positive (Figure 2b), CD10-positive (Figure 2c), and Ki-67 of 90% (Figure 2d), consistent with DLBCL, germinal center B-cell (GCB) subtype. Further laboratory testing showed that HIV Ag/Ab was positive. HIV infection was confirmed by western blot. A positron emission tomography/computed tomography (PET-CT) scan revealed multiple lymphadenopathies on both sides of the neck, mediastinum, and abdominopelvic cavity, and lesions involving the stomach, liver, and small bowel. This patient's final diagnosis was HIV-related diffuse large B cell lymphoma (DLBCL). Endoscopic findings of gastric DLBCL have various presentations, such as nodular, polypoid, ulcerofungating, ulceroinfiltrative, erosive, diffuse infiltrating, thickened fold-like, and mixed types [1–4]. This patient had developed multiple elevated central ulceration lesions, and the peripheral elevated portion had a heaped-up margin. The margin had a sharp, smooth edge that was not infiltrative and could be confused with a simple gastric ulcer [5–7]. Endoscopists should be aware of the possibility of gastric lymphoma when there are multiple ulcers with heaped-up margins.

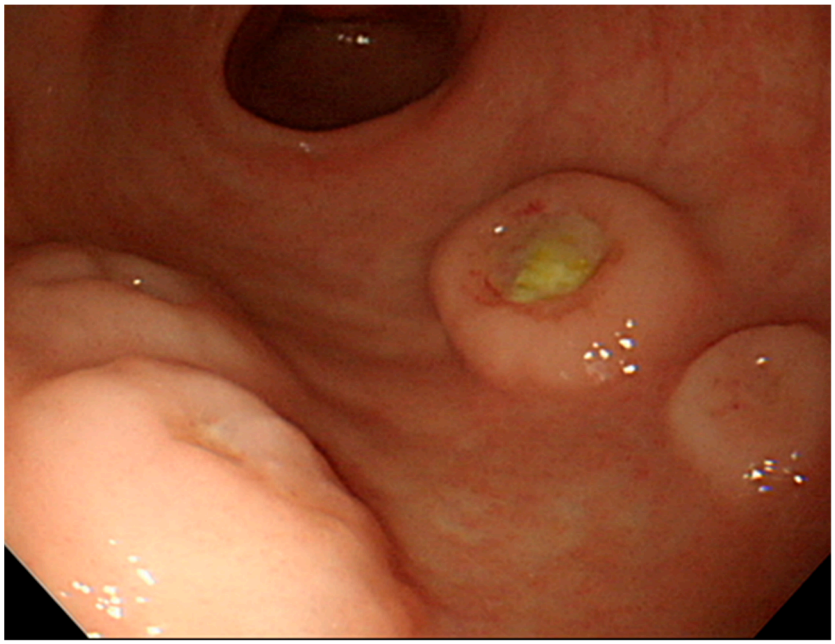

Figure 1. Upper endoscopy showed multiple gastric ulcers that were elevated round margin and were covered with exudate at base.

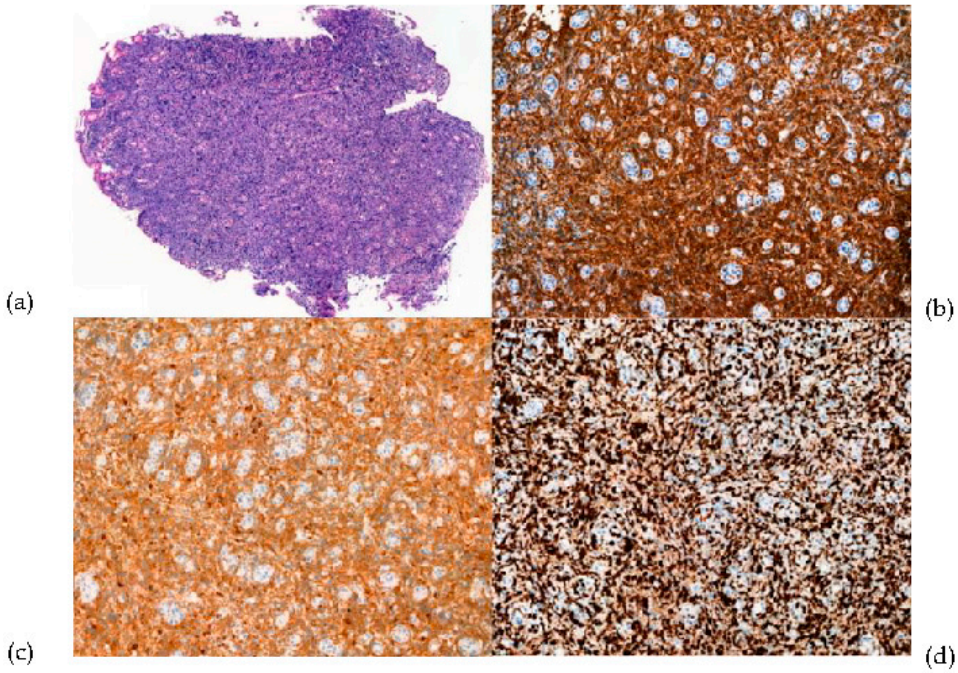

Figure 2. Gastric biopsy showed diffuse infiltration by atypical lymphoid cell infiltration with ulcerations ((**a**), upper left) and intense positivity for CD20 ((**b**), upper right), CD10-positive ((**c**), lower left), and Ki-67 of 90% ((**d**), lower right) at immunohistochemistry analysis.

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