

Cytomegalovirus gastritis after treatment with rituximab

We present a case of gastric ulcer with bleeding following chemotherapy with rituximab for non-Hodgkin's lymphoma (NHL).

A 68-year-old woman presented with hematemesis and melena. One year ago she had been diagnosed as having diffuse large B-cell NHL (stage IE) of the nasal root. She was treated with three courses of R-CHOP (rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisone) followed by radiation therapy at a dose of 40 Gy, resulting in complete remission of the NHL. However, the patient had a relapse, with evidence of NHL in the thyroid gland and the mediastinal lymph nodes. Two weeks before the patient had hematemesis, she had been administered the first cycle of a second course of R-CHOP. At presentation, her hemoglobin level was 5.2 g/dL, which was lower than 2 days earlier (7.9 mg/dL). An esophagogastroduodenoscopy revealed multiple, irregular-shaped ulcers, with clearly demarcated borders, in the body of the stomach (● Fig. 1 a).

One ulcer had vessels visible at the base (● Fig. 1 b), and a hemoclip was placed endoscopically. Histological examination of the biopsy specimens showed nuclear inclusions in the epithelial cells (● Fig. 2 a) with positive immunostaining for cytomegalovirus (CMV) (● Fig. 2 b).

Rituximab is a mouse/human chimeric monoclonal antibody that targets the CD20 antigen found on the surface of malignant and normal cells of B-cell lineage and has been proved to be effective in the treatment of B-cell NHL [1,2]. However, the use of rituximab is associated with the development of certain severe viral infections [3–5]. Cytomegalovirus gastritis should be considered in the differential diagnosis in patients with gastric ulcers who are receiving rituximab treatment.

Endoscopy_UCTN_Code_CCL_1AB_2AD_3AC

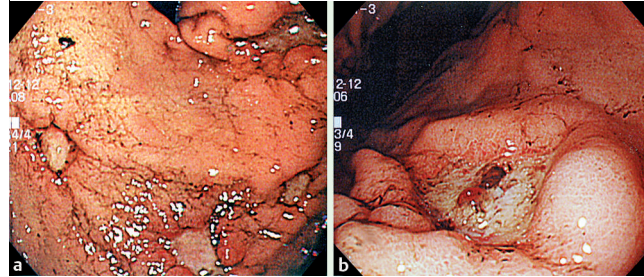


Fig. 1 Esophagogastroduodenoscopy showing: **a** multiple ulcers with sharply defined borders; and **b** blood vessels at the base.

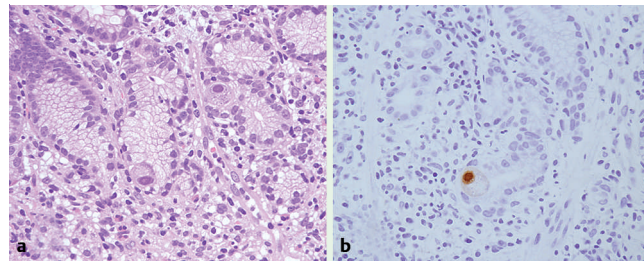


Fig. 2 Histological image showing: **a** epithelial cells containing nuclear inclusions; and **b** positive immunostaining for cytomegalovirus.

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