

Case Report

A Primary Gastric T-Cell Lymphoma with Ki-1-Positive Cells

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A Case report, and author's comments

The patient was a 65 year old man, who had complained of an epigastric pain. The gastric biopsy was brought to me. Microscopically large lymphoma cells proliferated diffusely. Their nuclei were irregularly-shaped. Their cytoplasm was clear, but I thought that the clear cytoplasm was an artifact because it was accompanied by an ulcerative lesion with acute inflammation. Mitoses were scattered. The lymphoma cells were positive for UCHL-1, but negative for L 26. My diagnosis was a malignant lymphoma of a diffuse large cell type. My comments were as follows. 1) This case was a T-cell lymphoma, so it was necessary to decide the stage classification. 2) Whether the mother's birthplace was HTLV-1-endemic or not should be checked. I also recommended the examination of HTLV-1 antibody. 3) Whether the primary site of this T-cell lymphoma was the stomach or not should be determined. 4) After that, chemotherapy or an operation and/or both, should be recommended.

Result

The patient was admitted to another hospital. In this hospital, endoscopic examination by gastroscope showed the existence of a gastric ulcer. The staging examination was also performed, and it was decided that the primary lesion was the stomach. A total gastrectomy with regional lymph nodes was performed. Two ulcers were noted in the antrum. HTLV-1 antibody was negative. Lymphoma cells had infiltrated into the regional lymph nodes and also to the liver, with a continuity from the stomach. Medium-sized to large cells had diffusely infiltrated from mucosa to subserosa. The lymphoma cells had irregular-shaped nuclei and smaller cells had dark chromatin. Mitoses were often observed (Figure 1). The lymphoma cells were positive for UCHL-1 (Figure 2) and the residual small normal lymphocytes were positive for L 26. Some large

lymphoma cells were positive for BerH2 (Ki 1). Positive cells tended to be grouped in some areas (Figure 3). Our results of this case proved it to be a diffuse, large cell type lymphoma according to the LSG classification.

Chemotherapy was performed, but pneumonia and pulmonary hemorrhages occurred, although the cause of the pulmonary bleeding was unknown, and therefore chemotherapy had to be discontinued. He has complete remission, but he is still in the hospital.

This case was diagnosed as a diffuse, large cell lymphoma according to Japanese LSG classification. According to the updated Kiel classification, this case may be diagnosed as an HTLV-1-negative, pleomorphic, medium-sized and large cell type lymphoma.

Discussion

Two of the 5 participants diagnosed this case as CB/CC, one as CB and the other one as a T-cell lymphoma, a rare angiocentric case. Prof. K. Lennert said that his diagnosis was a T-cell, pleomorphic, medium-sized and large cell type lymphoma with Ki-1 positive cells. And also he said that one half of the T-cell lymphoma included some Ki-1 positive cells, and that a lymphoma in which more than 80% of lymphoma cells were positive for Ki-1 should be diagnosed as an anaplastic, large cell lymphoma (Ki-1 lymphoma). According to the examination after the seminar, the lymphoma cells in some areas were positive for CD3 (Figure 4).

Key words: Gastric T-cell lymphoma, Ki-1-positive

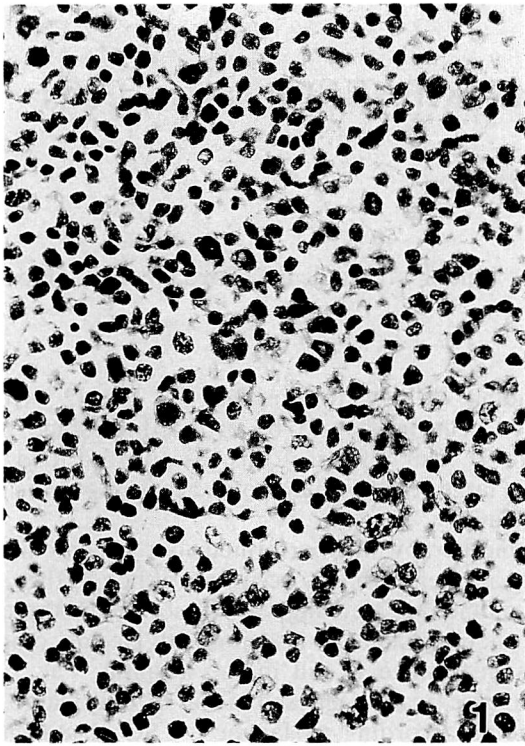


Fig. 1: Diffuse infiltration of medium-sized to large cells which have irregular-shaped nuclei. $\times 460$.

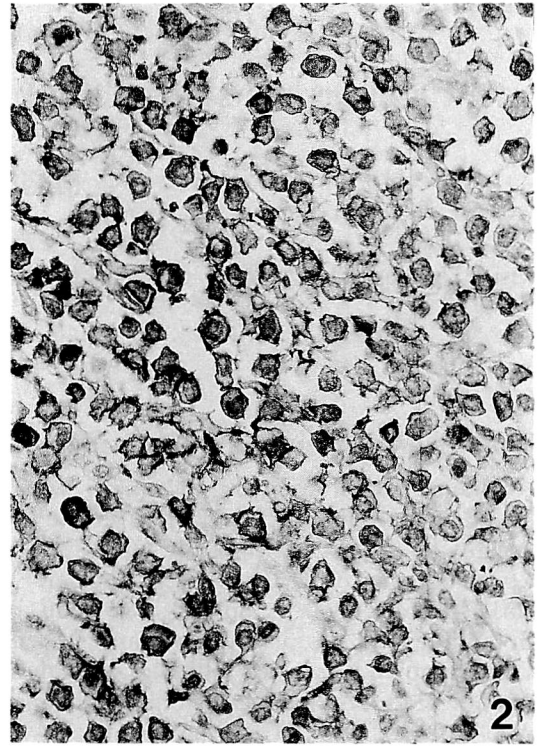


Fig. 2: Lymphoma cells positive for UCHL-1. $\times 460$.

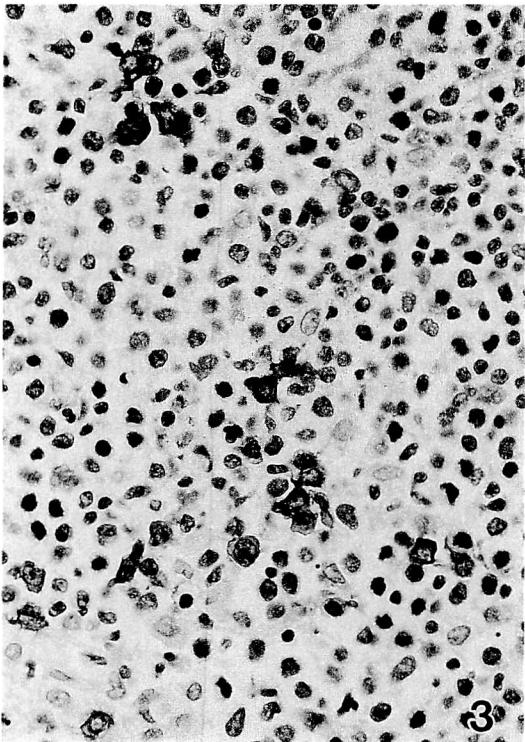


Fig. 3: Some lymphoma cells positive for BerH2. $\times 460$.

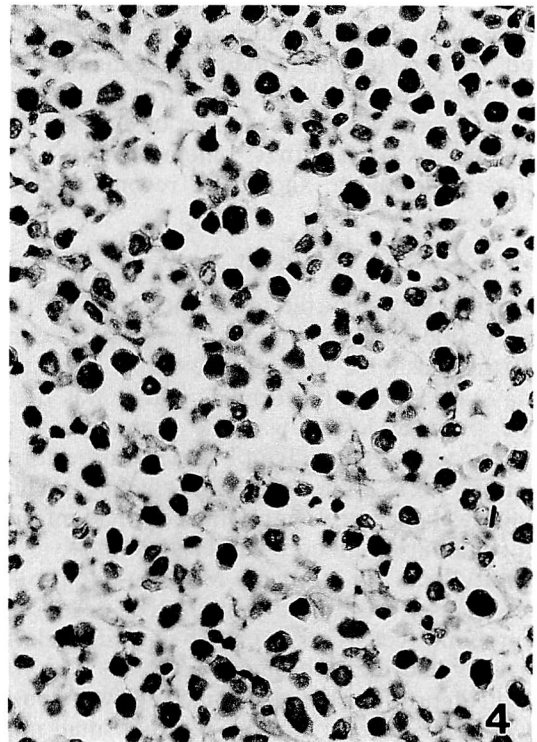


Fig. 4: Lymphoma cells in some areas, positive for CD3. $\times 460$.