The first report of colonic involvement of angioimmunoblastic T-cell lymphoma

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Cite this article as: Turan İ, Özsan N, Doğanavşargil B, Arslan Davulcu E, Bülbül H. The first report of colonic involvement of angioimmunoblastic T-cell lymphoma. Turk J Gastroenterol 2020; 5: 413-4.

Dear Editor,

A 73-year-old woman presented with 8 months of rectal bleeding accompanied by tenesmus. She was diagnosed to have angioimmunoblastic T-cell lymphoma (AITL) by histopathological and immunohistochemical examination of tonsillectomy and lymph node excision materials in 2016. Initially, the patient was administered with six courses of CHOP (cyclophosphamide, doxorubicin, vincristine, and prednisone) regimen every 21 days, and complete remission was achieved. However, 14 months later, the patient was diagnosed with a stage 4 relapsed disease. Pralatrexate weekly for six of every seven weeks along with folinic acid and vitamin B12 were initiated. After the fourth course of pralatrexate, colonoscopy was performed because of rectal bleeding.

Colonoscopy showed edematous and nodular appearance in the cecum (Figure 1) and multiple round and oval ulcers in the rectum (Figure 2). Multiple biopsy specimens were taken from the cecum and rectum. The histopathological examination revealed a diffuse infiltration of lamina propria with medium and mostly large cells; a prominent vascular proliferation and some immunoblastic large cells were seen in the background (Figure 3). Immunohistochemically, the neoplastic cells were positive for CD3, PD1 (Figure 4), and partly for Bcl6; immunoblastic large cells were positive for CD20, CD30, and MUM1, and some of them were Epstein–Barr virus (EBV) positive by in situ hybridization for EBV-encoded small RNA. With this immunophenotypic profile, the patient was diagnosed as the colonic involvement of AITL. The patient was referred to hematology department for further treatment.

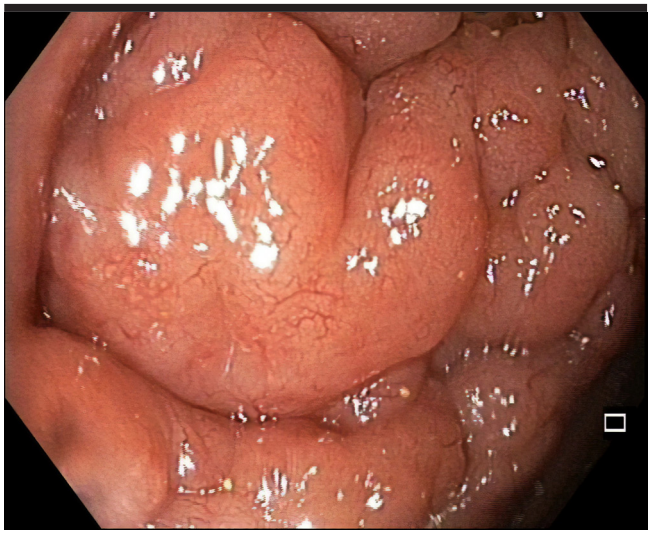

Figure 1. Edematous and nodular appearance in the cecum on colonoscopic examination.

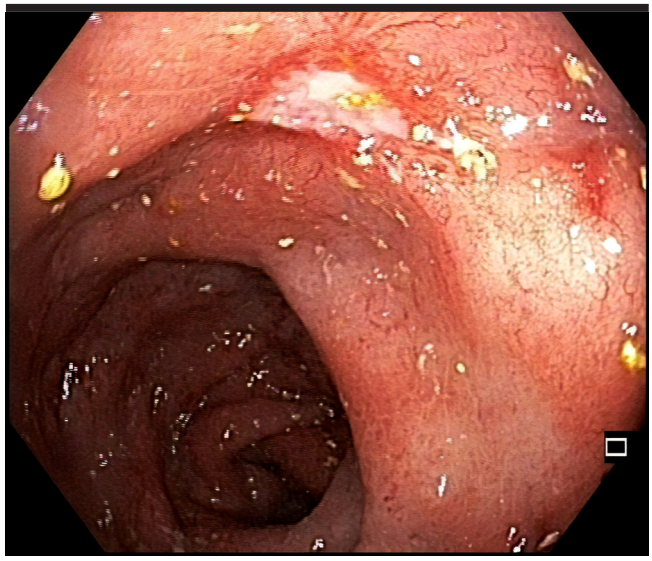

Figure 2. Multiple round and oval ulcers in the rectum.

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Received: ***June 28, 2019*** *Accepted:* ***August 22, 2019***

DOI: ***10.5152/tjg.2020.19506***

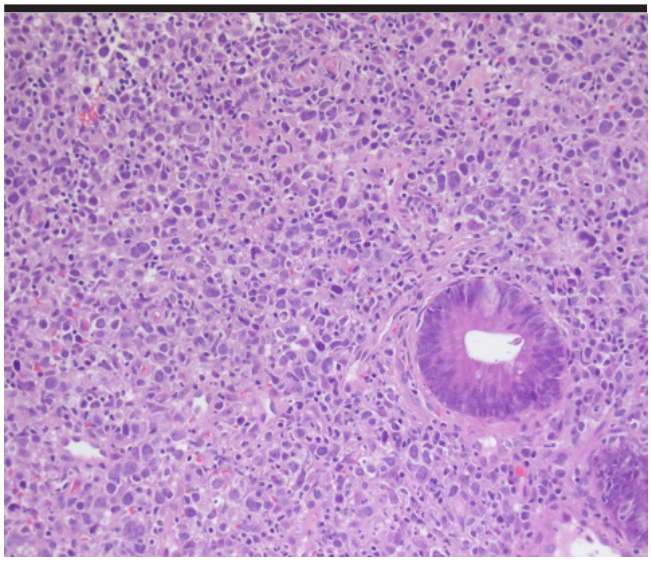

Figure 3. A diffuse infiltration of lamina propria with medium and mostly large cells; a prominent vascular proliferation and some immunoblastic large cells (Hematoxylin-Eosin staining x 20).

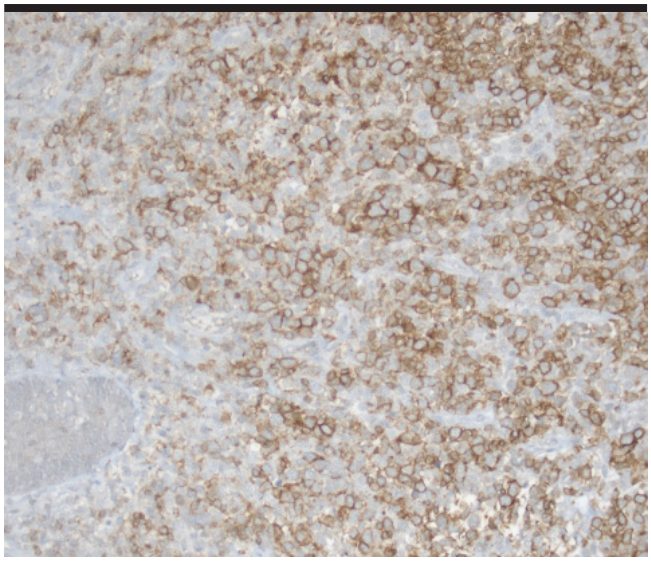

Figure 4. Immunohistochemically the neoplastic cells were positive for PD1 (×20).

AITL is a rare subtype of peripheral T-cell lymphoma, which accounts for approximately 1%-2% of all non-Hodgkin's lymphomas (1). About one-third to half of patients have extranodal involvement including liver, spleen, skin, and lung (2, 3). To our best knowledge, this is the first case of colonic involvement of AITL in the pertinent literature.

Informed Consent: N/A.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – I.T.; Design – I.T., N.O., E.A.D., H.B.; Supervision – I.T.; Resource - I.T., N.O., B.D., E.A.D., H.B.; Materials - I.T., N.O., B.D., E.A.D., H.B.; Data Collection and/or Processing - I.T., N.O., B.D., E.A.D., H.B.; Analysis and/or Interpretation - I.T., N.O., B.D., E.A.D., H.B.; Literature Search - I.T., N.O., B.D., E.A.D., H.B.; Writing - I.T., N.O., E.A.D., H.B.; Critical Reviews - I.T., N.O., B.D., E.A.D., H.B.

Conflict of Interest: The authors have no conflict of interest to declare.

Financial Disclosure: The authors declared that this study has received no financial support.

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