

Peripheral T-Cell Lymphoma, Not Otherwise Specified, Diagnosed from Prostate Tissue: A Rare Case

Prostat Dokusundan Tanı Konulan, Periferik T-Hücreli Lenfoma, Başka Türlü Sınıflandırılmamış: Nadir Bir Olgu

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To the Editor,

Mature T lymphocytes give rise to an uncommon subtype of non-Hodgkin lymphoma called T-cell lymphoma (TCL). Many cases of peripheral T-cell lymphoma (PTCL), a diverse collection of neoplasms, are classified as PTCL, not otherwise specified (PTCL-NOS), because they cannot be classified [1]. Excluding Asia, where extranodal natural killer/TCL has become the most frequent subtype, PTCL-NOS is the most common subtype worldwide [2]. The median age at diagnosis is 60 years and most patients are adults. The prevalence of the diagnosis is higher among men than women at a ratio of nearly 2:1 [3,4]. According to a worldwide database of 340 cases of PTCL-NOS, 38% of patients have nodal disease alone, 49% have nodal plus extranodal disease, and 13% have extranodal disease without nodal involvement [4]. In the same study, bone marrow was implicated in 20% of the cases, while hepatomegaly and splenomegaly were observed in 17% and 24%, respectively [4]. One-third of patients reported having systemic B symptoms such as fever, night sweats, and weight loss [4]. Extranodal illness is most frequently observed in the skin and gastrointestinal system. Cases of lung, salivary gland, and central nervous system involvement are less common [5,6]. Serum lactate dehydrogenase is high in half of these cases, while hypergammaglobulinemia is seen in 14%. Leukemic presentations are uncommon, but circulating lymphoma cells may be seen [4]. In this report, we present a rare case of PTCL-NOS diagnosed from prostate tissue with bone marrow involvement. This patient, a 65-year-old man, consented to the publication of his case in an academic journal. He presented to the urology clinic with complaints of difficulty urinating for 4

months and was found to have elevated total and free prostate-specific antigen levels of 13 and 1 ng/mL, respectively. There was no history of urinary tract infection. The patient also had B symptoms. Peripheral blood smear revealed normochromic normocytic anemia (hemoglobin: 7.1 g/dL), severe neutropenia ($0.17 \times 10^9/L$), and thrombocytopenia ($18 \times 10^9/L$). Bone marrow aspiration revealed an increased proportion of large lymphocytes, reaching up to 60%. A prostate biopsy confirmed the diagnosis of PTCL-NOS with bone marrow involvement. Positron emission tomography/computed tomography revealed diffuse bone marrow, lymph node, and prostate involvement (stage IV), as depicted in Figure 1. Chemotherapy was initiated with cyclophosphamide, doxorubicin, vincristine, etoposide, and prednisolone. Anthracycline-based chemotherapy is the cornerstone of immunotherapy for CD30-negative PTCL [7]. The biopsy of the patient presented here was negative for CD30. Currently, considering the balance between toxicity and survival outcomes in patients with CD30-positive PTCL, the BV+CHP regimen (brentuximab vedotin, cyclophosphamide, doxorubicin, and prednisone) is recommended over other chemotherapy regimens [8]. In the literature, PTCL-NOS diagnosed from prostate tissue is very rare. In cases of elevated prostate-specific antigen, lymphomas other than solid tumors of the prostate should be considered. Rapid and definitive diagnosis and treatment are vital because TCLs are aggressive and expand rapidly.

Keywords: Lymphomas, T-cell lymphoma, Non-Hodgkin lymphoma, Prostate

Anahtar Sözcükler: Lenfoma, T-hücreli lenfoma, Non-Hodgkin lenfoma, Prostat

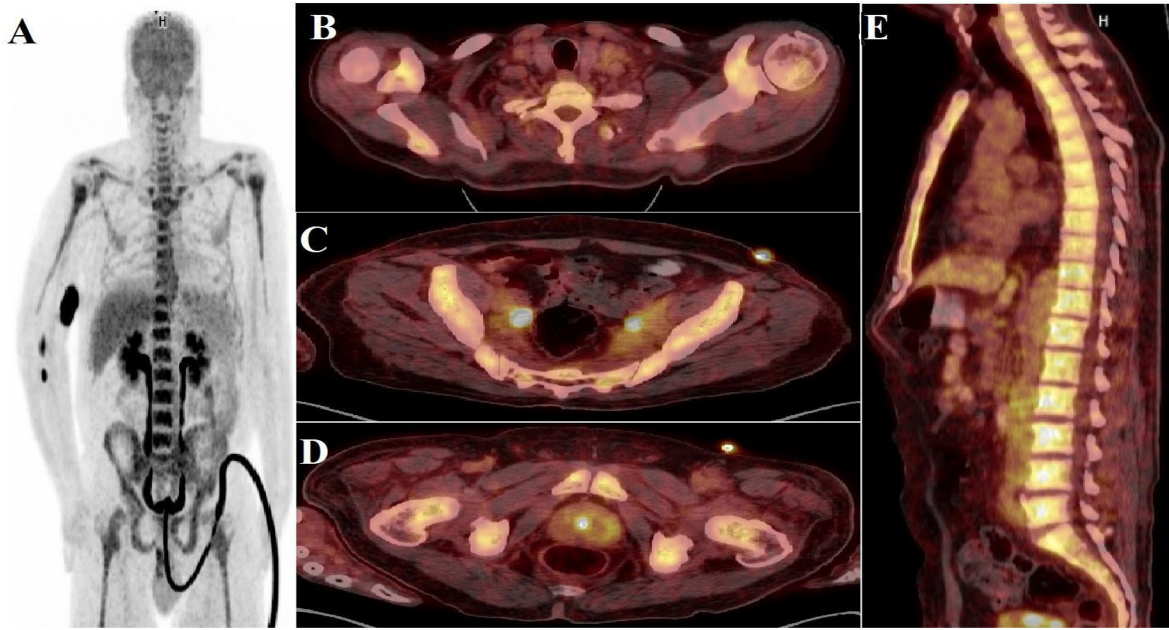


Figure 1. Fluorodeoxyglucose (FDG) positron emission tomography-computed tomography imaging showed increased FDG uptake in the left supraclavicular area (B) and bilateral paraaortic-parailiac lymph nodes in the abdomen (C). Additionally, diffusely increased FDG uptake was observed in the prostate gland parenchyma (D) and bone marrow (A, E).

Ethics

Informed Consent: Informed consent was obtained from the patient.

Footnotes

Authorship Contributions

Surgical and Medical Practices: R.Ç., H.Ö., C.S.; Concept: R.Ç.; Design: R.Ç.; Data Collection or Processing: R.Ç., H.Ö., C.S.; Analysis or Interpretation: R.Ç.; Literature Search: R.Ç.; Writing: R.Ç.

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