

Presentation of mantle cell lymphoma with symptoms of prostatism

Memiş H. Atay¹, Engin Kelkitli², Ömer Alici³, Fatih Çilingir⁴, Mehmet Turgut⁴

¹ Van Training and Research Hospital, Van, Turkey

² Erzurum Region Training and Research Hospital, Erzurum, Turkey

³ Department of Pathology, Samsun Research and Training Hospital, Samsun, Turkey

⁴ Department of Internal Medicine, 19 Mayıs University Medical School, Samsun, Turkey

Mantle cell lymphoma (MCL) constitutes 6% of all cases of mature B-cell non-Hodgkin lymphomas. Extranodal involvement may occur in the gastrointestinal system, breasts, pleura, and orbits. We present a rare case of a patient with MCL and prostate involvement.¹

A 71-year-old male patient was admitted to our hospital owing to urination disorders persisting for 2 months. A transurethral resection had been previously performed to diagnose benign prostatic hypertrophy. A postoperative pathological examination demonstrated MCL with prostate involvement. A pathological analysis revealed that the patient was positive for CD20, CD5, and cyclin D1. CD23- and CD10-negative staining showed atypical lymphoid cells infiltrating the prostate tissue (FIGURE 1A). The patient had no other symptoms and there was no history of other systemic diseases. A physical examination revealed left axillary, left inguinal, and right inguinal lymphadenopathies (1×1.5 cm, 1×1.5 cm, and 1×1 cm, respectively). Peripheral blood smear showed atypical immature lymphocytes with a size of 1 to 1.5 times that of a normal peripheral blood lymphocyte (FIGURE 1C). Bone marrow aspiration revealed that 60% of the lymphocytes were atypical immature cells. A bone marrow biopsy showed CD5-, CD20-, and cyclin D1-positive stained tumor formations of the lymphoid cells. A computed tomography (CT) scan of the chest and abdomen showed general lymphadenopathy. Endoscopy and colonoscopy performed for iron deficiency-related anemia demonstrated common polypoid lesions in the stomach and colon. Biopsies also revealed CD20-, CD5-, cyclin D1-, and Bcl-2-positive atypical lymphocytes, which were also CD23- and CD10-negative. Based on those findings, the patient was diagnosed with MCL, Ann Arbor stage IVA. A treatment with 4 cycles of rituximab, cyclophosphamide, daunorubicin, vincristine, and prednisone (R-CHOP) was scheduled.

Correspondence to:

Dr. Engin Kelkitli, Erzurum Bölge Eğitim ve Araştırma Hastanesi, 25 770 Erzurum, Turkey, phone: +90-505-272-22-89, fax: +90-442-232-50-90, e-mail: ekelkitli@gmail.com

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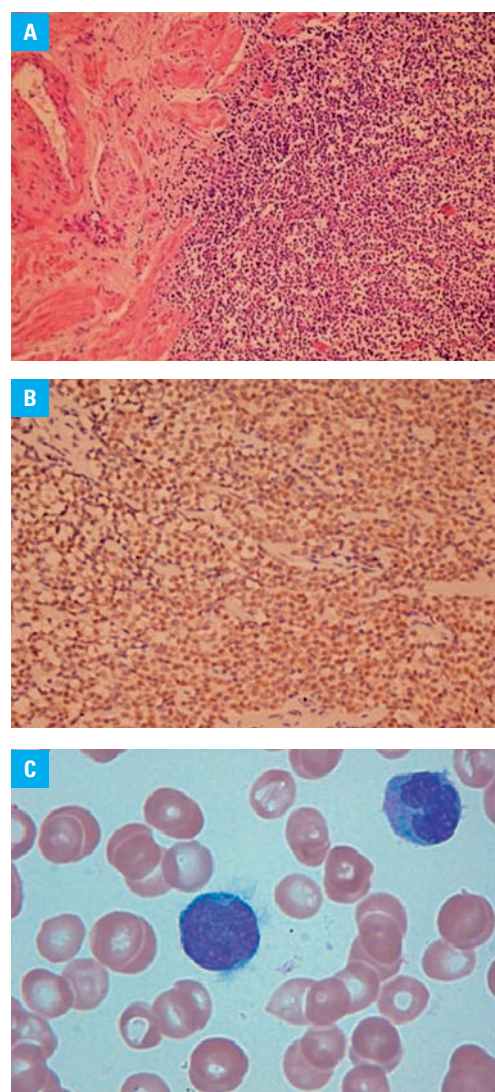


FIGURE 1 A – lymphoid infiltrate and adjacent acini (10XPower); B – cyclin-D1 nuclear positivity (10XPower); C – atypical immature lymphocytes with a size of 1 to 1.5 times that of a normal peripheral blood lymphocyte (100XPower)

After the complete course of 4 cycles of R-CHOP chemotherapy patient responded well to treatment (reduction of more than 50% on CT). Additional radiotherapy was also performed on lymph nodes of the left main iliac artery were CT indicated residual tumor involvement. The patient is currently in remission, and he continues to be followed up.

According to the criteria developed by Bostwick et al.,² prostate lymphoma is divided into primary and secondary. Both types are extremely rare. Patients usually complain of difficulty urinating or inability to urinate. When observed at a more advanced age, transurethral resection is generally performed with a preliminary diagnosis of prostate hypertrophy or prostate cancer. Diagnosis of lymphoma is established based on the biopsy. Fatigue, appetite loss, and weight loss are infrequent among such patients.^{3,4}

In conclusion, MCL presenting with prostate involvement has been rarely reported in the literature.⁵ In cases with atypical lymphocyte infiltration in prostate biopsy, MCL should be considered by clinicians as a differential diagnosis.

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