

Mantle cell lymphoma of the prostate

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A 72-year-old Caucasian male with a history of hypertension, diabetes mellitus, and congestive heart failure was admitted to the local community hospital in March 2004 for elective transurethral prostatectomy. His PSA value was normal at 0.79 ng/mL. He denied having fevers, night sweats, or recent weight loss (so called “B symptoms”). He underwent an uneventful transurethral resection of the prostate based on a clinical diagnosis of benign prostate hypertrophy.

However, subsequent pathologic review of the prostate biopsy specimens demonstrated sheets of monotonous atypical lymphoid cells with irregularly shaped nuclei and slightly dispersed chromatin. The immunohistochemistry demonstrated positivity for CD20 and cyclin D1 (BCL-1) and BCL-2 overexpression, consistent with mantle cell lymphoma. Further work up included positron-emission tomography (PET), which demonstrated increased [¹⁸F]fluorodeoxyglucose (FDG) uptake in the chest, retroperitoneum, prostate, and inguinal areas (Figure 1). Bone marrow biopsy and aspirate demonstrated extensive lymphomatous involvement of the marrow. He was staged as 4A.

The patient was treated with four cycles of CVP (cyclophosphamide, vincristine, and prednisone) and rituximab (Rituxan). Shortly after completion of this regimen, he complained of abdominal discomfort, and colon involvement was documented. He then was treated with a combination of fludarabine and cyclophosphamide, which led to significant improvement of his abdominal discomfort, an increase in appetite, and weight gain. However, the patient experienced profound fatigue and asthenia following four cycles of fludarabine and cyclophosphamide, necessitating discontin-

uation of the treatment. Subsequently, a decision was made to closely observe the patient. At this time, his asthenia is improving. He has no abdominal pain, urinary symptoms, or “B” symptoms.

Lymphoma of the prostate is rare. Among 1,474 patients with malignancy of the prostate studied at M. D. Anderson Cancer Center, only 18 nonleukemic secondary malignancies were identified.¹ In another study, postmortem examination of 6,000 male patients who died of cancer revealed that only 185 (3.1%) patients had metastatic prostate malignancy, of which 49 patients (0.8% of all autopsied patients) had non-Hodgkin’s lymphoma.² Among 62 patients with prostatic lymphoma, the majority had diffuse large B-cell lymphoma, followed by chronic lymphocytic leukemia/small lymphocytic lymphoma.²

To our knowledge, only one case of mantle cell lymphoma of the prostate has been described.³

The current report adds to the growing body of evidence of protean manifestations of this disease.

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References

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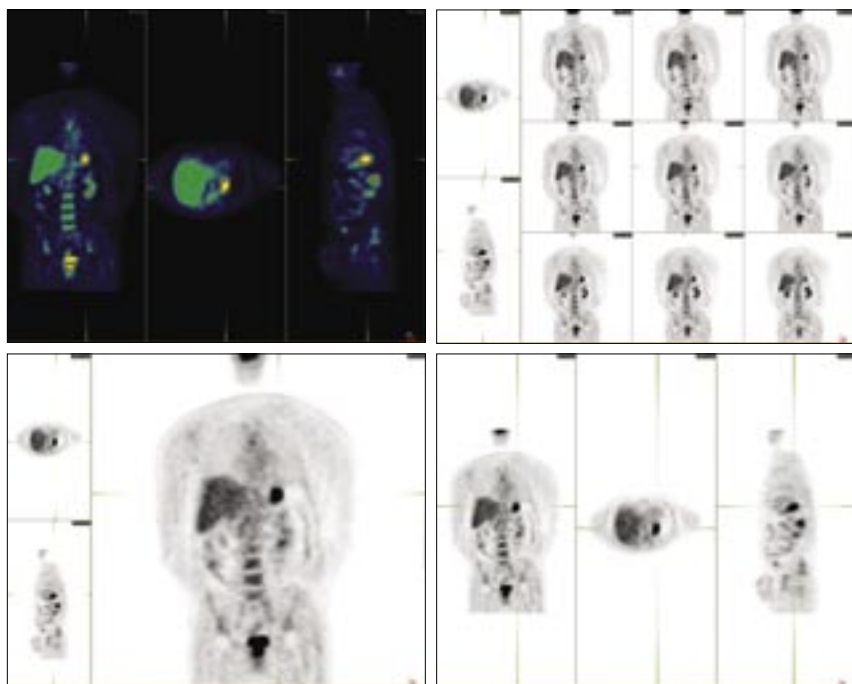


FIGURE 1 Whole-body PET scans obtained prior to the initiation of chemotherapy. Areas of increased FDG-18 uptake may be seen in the chest, a paraspinous location below the diaphragm, and the prostate. Images courtesy of Sean Mitchell, Division of Nuclear Medicine, University Hospitals of Cleveland, Cleveland, Ohio.