

Marginal Zone Lymphoma of Urinary Bladder: A Case Report

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Abstract

Involvement of urinary bladder has been documented in 10-25% of Lymphomas and Leukemias, but lymphoid neoplasms arising primarily in the urinary bladder are rare. Low grade B non-Hodgkin lymphomas are the most common. This is a case report of a 68-year old male with primary low-grade B non-Hodgkin Lymphoma of the urinary bladder consistent with extra-nodal Marginal zone lymphoma.

Keywords: Urinary Bladder; Low grade B NHL.

Introduction

10-20% of patients with Non-Hodgkin Lymphoma have infiltration of the urinary bladder at autopsy. Hodgkin Lymphoma involves the bladder in only 4% of patients. Primary Non-Hodgkin Lymphoma of the urinary bladder is rare. The disease is usually detected in middle-aged women undergoing cystoscopy for non-specific urinary symptoms. Most are seen as discrete tumor masses with fleshy white appearance rather than diffuse

infiltrates. Majority of the tumours are of the low or intermediate grade.

Case history

68 year old male presented with irritative voiding symptoms. Ultrasonography showed gross thickening of the bladder wall with bilateral Hydronephrosis. CT scan of the abdomen revealed thickening of the bladder wall with extension of lesion to the right lateral pelvic wall. Cystoscopy showed only a small capacity bladder but no intraluminal lesions. Hence laparotomy was done and biopsy taken.

Pathological findings

Biopsy taken from the bladder wall showed bundles of detrusor smooth muscle infiltrated by a tumor composed of sheets of small lymphoid cells with scanty cytoplasm, round-

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Figure 1: Sheets of small lymphoid cells infiltrating detrusor smooth cells (H&E, x100)

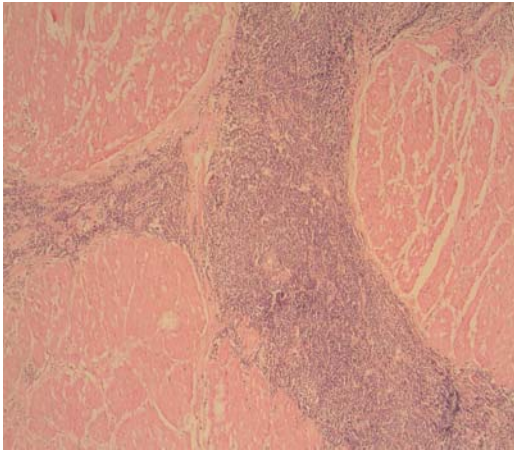
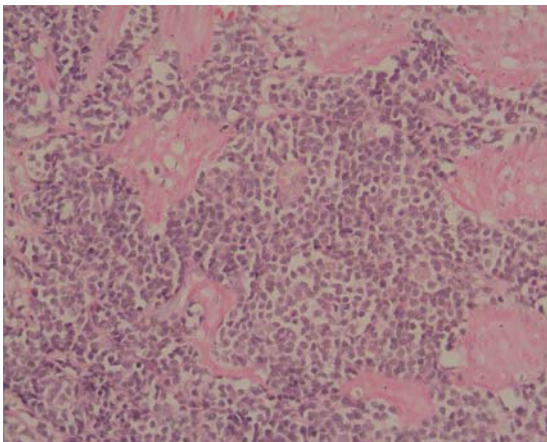
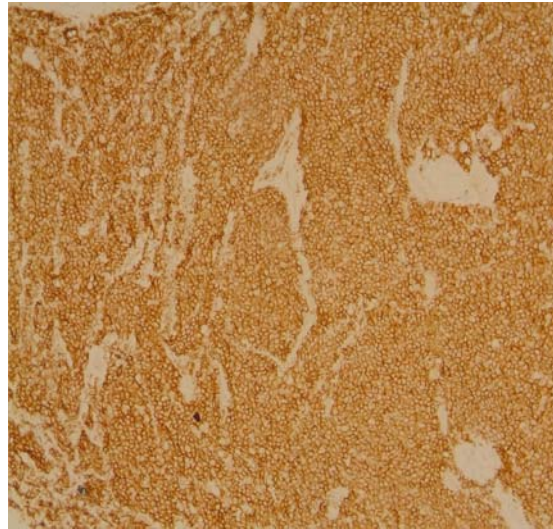


Figure 2: Lymphoid cells show scant cytoplasm, clumped nuclear chromatin & sparse mitotic activity (H&E, x100)



regular nuclei showing clumped chromatin. There were scattered larger cells with vesicular nuclei and one to three nucleoli resembling centroblasts. Mitotic activity was sparse. Immunohistochemistry done at Department of Pathology, Christian Medical College revealed that tumor cells were CD 20 positive and CD 3 negative with a MIB-1 proliferation index of 5%. The tumor cells were negative for CD5, CD10 and CD23. The final impression was low grade B non-Hodgkin lymphoma of urinary bladder. The immunomorphological features were consistent with Extranodal marginal zone lymphoma. The patient underwent

Figure 3: Strong positive staining for CD 20(H&E, x200)



chemotherapy with good response and is on follow-up.

Discussion

The first recorded case of lymphoma of the bladder was reported by Eve and Chaffey in 1885 [4]. Malignant Lymphomas of the bladder can be classified into one of three different clinical groups: 1) Primary lymphoma localized to the bladder, 2) Lymphoma presenting in bladder as the first sign of disseminated disease, 3) Recurrent bladder involvement by lymphoma in patients with a history of malignant lymphoma [4].

Grossly, bladder lymphomas are usually large masses centered in the dome or lateral walls. They are nearly always of the non-Hodgkin type and majority are low-grade B cell NHL. Recent data suggest that the most common type of low-grade B NHL is the extranodal marginal zone lymphomas of MALT type [1].

Lymphoepithelial lesions in MALT-type lymphoma involve transitional epithelium, and their presence in high grade lymphoma suggests a primary origin owing to transformation of low grade MALT-type [2]. They are more common in females and are associated with a history of chronic cystitis [3].

The differential diagnosis is with poorly differentiated carcinomas and other Small cell cancers. The prognosis of Primary Bladder Lymphoma has been favorable, with many patients alive and well several years after treatment [5]. Local radiotherapy appears to confer long-term control [3]. Ureteric obstruction and acute renal failure are serious complications [5].

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