Synchronous prostate adenocarcinoma and Hodgkin lymphocytic lymphoma clinically manifested with lower urinary tract symptomatology: a case report and literature review

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ABSTRACT
Of all malignant neoplasia only 0.2% are prostatic hematologic neoplasia. They can be of primary origin or secondary to hematogenic dissemination of myeloma, lymphoma, or leukemia. Ten percent of non- Hodgkin lymphoma affects the urinary tract but only one percent affects the prostate. It is more frequent in men over sixty years of age. The clinical case is described of a 66-year-old man presenting with 30 kg weight loss, asthenia, hyporexia, nocturia (two interruptions), bladder tenesmus, straining, urinary frequency, dysuria, and decrease in urinary stream flow, all six months prior to consultation.

Keywords: Adenocarcinoma of the prostate, tumor synchronous, lymphocytic lymphoma, Mexico.

RESUMEN
De todas las neoplasias malignas, sólo 0.2% son neoplasias hematológicas prostáticas, pueden ser de origen primario o secundario a una diseminación hematogénea de un mieloma, linfoma o leucemia. El linfoma no-Hodgkin afecta en 10% al tracto urinario, pero sólo 1% a la próstata; siendo más frecuente en varones mayores de 60 años. Se presenta el caso clínico de un masculino de 66 años que presentó desde seis meses previos a la visita, pérdida de peso de 30 kg, astenia, hiporexia, nicturia dos ocasiones, tenesmo vesical, pujo, polaquiuria, disuria y disminución de la fuerza del chorro urinario.

Palabras clave: Adenocarcinoma de próstata, tumor sincrónico, linfoma linfocítico, México.
INTRODUCTION

Lymphoma rarely infiltrates the prostate and represents a rate of 1/1000 of all malignant prostate tumors. Primary disease of the prostate from lymphoma is less frequent (35%) than secondary prostatic lymphoma (65%). It is frequent in non-Hodgkin lymphoma with its known extranodal invasion. Follicular lymphoma is less frequent and infiltration by Burkitt’s lymphoma is very rare. Lymphoma generally presents in the patient around 60 years of age and can manifest as low urinary tract symptomatology secondary to prostatic infiltration. Symptomatology can include urinary urgency, urinary frequency, hematuria, and acute urine retention. Lymphoma as primary tumor and a synchronous tumor such as prostate adenocarcinoma is extremely rare. Non-Hodgkin lymphoma infiltration to the prostate is less than 1% and Hodgkin lymphoma is even lower. However, it is rarely diagnosed and is more often only reported in autopsies. Prognosis is correlated with histological type and extension towards the prostate.

OBJECTIVE

The objective of the present article was to describe a case of prostate adenocarcinoma synchronous with Hodgkin lymphocytic lymphoma that manifested clinically with lower urinary symptomatology and to carry out a literature review of the subject.

CASE PRESENTATION

Patient is a 66-year-old man with past medical history of right inguinal hernioplasty 35 years prior and arterial high blood pressure for which he is being treated. Present disease onset was 6 months earlier, with weight loss of 30 kg, asthenia, hyporexia, nocturia (2 interruptions), bladder tenesmus, straining, urinary frequency, dysuria, and decrease in urinary stream flow. Physical examination revealed tegument paleness, chest with no alterations, palpable abdominal tumor that was hard, fixed, approximately 10 x 10 cm, regular edges, located in the mesogastrium. Inferior extremities had bilateral infrapatellar edema, and pitting edema ++/+++. Digital rectal examination (DRE) revealed 3 x 3 cm prostate with increased consistency, mobile, well-defined edges, euthermic, non-painful, suspicious, and with no lymph nodes. Prostate specific antigen (PSA) was 6.46 ng/dL, free PSA fraction 1.23 ng/mL, percentage of free to total PSA, 19. Ultrasound-guided transrectal biopsy of the prostate showed prostate of 2.7 x 2.4 x 3.4 cm (11.5 cc), 12 g. Transrectal biopsy diagnosis was acinar adenocarcinoma of the prostate, Gleason score 6 (3+3). Computed tomography scan revealed multiple periaortic and retrocaval retroperitoneal adenopathies.

DISCUSSION

Lymphoma presents in patients when they are around 60 years old. Presentation is usually difficult to distinguish because it includes emptying symptomatology accompanied with fever, weight loss, hepatomegaly, inguinal lymphadenopathy, and in only 20% of patients, elevated PSA. Diagnosis is difficult because prostate
biopsies have 22% sensitivity and so another urinary or extraurinary primary origin must be detected. More than 60% of lymphoma patients die from the disease. Survival at 10 years is possible with chemotherapy.1, 7-9

**CONCLUSIONS**

There are very few cases reported in the literature of Hodgkin lymphocytic lymphoma that infiltrate the prostate. Differential diagnosis including prostatitis, leukemia, small cell carcinoma, pseudolymphoma, Hodgkin lymphoma, and lymphoepithelioma needs to be carried out in those patients that present with lower urinary tract symptomatology.

**BIBLIOGRAPHY**