Prostate cancer manifesting as generalized lymphadenopathy

Kristian Krpina[1], Romano Oguic[1], Ivan Pavlovic[2], Maksim Valencic[1], Zeljko Fuckar[1]
[1] *Department of Urology, Clinical Hospital Center Rijeka, Croatia*
[2] *Department of Radiology, Clinical Hospital Center Rijeka, Croatia*

Abstract

We describe a case of 64-year old man who clinically presented with inguinal lymphadenopathy. Biopsy of prostate and inguinal lymph nodes confirmed the diagnosis of prostate cancer. Hormonal treatment was started and at the most recent follow-up, 6 years later, the patient is asymptomatic with a non-detectable PSA level.

Key words: generalized lymphadenopathy, prostate cancer, survival, treatment

Correspondence: Kristian Krpina, MD, MSc
Department of Urology, Clinical Hospital Center Rijeka, Croatia
Tome Strižića 3, 51000 Rijeka, Croatia
Tel: 00 385 51 218943
e-mail: kristiank@net.hr

Introduction

Generalized lymphatic metastases are a very uncommon manifestation of prostate cancer. We report a case of prostate cancer which clinically manifested as generalized lymphadenopathy in the absence of urinary symptoms.

Case report

In September 2004 a 64-year-old male was referred to Clinical Hospital Center Rijeka for a constipation. The patient reported swelling of the left leg and suprapubic fullness. He denied any voiding difficulties.

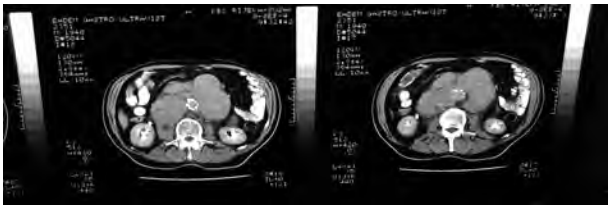
The patient's past medical and surgical history were not contributary.

Physical examination of the patient showed palpabile suprapubic fullness, enlarged lymph nodes in left inguinum and left leg oedema. DRE revealed nodular induration in the lateral lobes of the prostate which partially ocluded the rectum. PSA level was 152 ng/mL. TRUS showed prostatic enlargement with multiple hypoechoic peripheral lesions.

Chest X ray showed no pathological findings. IVU and cystography showed bladder dislocated to the projection of right iliac bone (fig. 1).



CT of the abdomen and pelvis was remarkable for an enlarged retroperitoneal and inguinal lymph nodes with dislocation of the left ureter and bladder to the right side (fig. 2). No pelvic lymphadenopathy was observed.

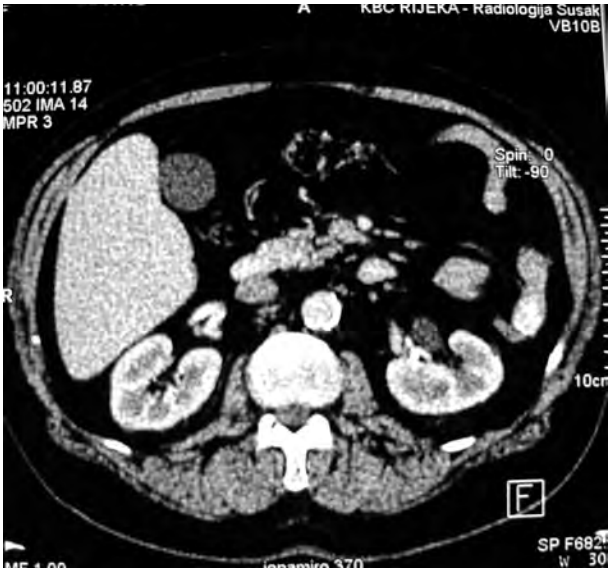


The bone scan showed metastasis in fifth thoracic vertebra.

Transrectal biopsy of the prostate demonstrated adenocarcinoma (Gleason score 5+5). Biopsy of the left inguinal lymph node also revealed adenocarcinoma with immunohistochemical staining that was strongly positive for PSA.

The patient underwent castration and therapy was continued with oral estramustine phosphate.

At the most recent follow-up, 6 years later, DRE, IVU, CT and bone scanning showed no evidence of disease (fig. 3, fig. 4). The patient was asymptomatic with a PSA level of 0 ng/mL.



Discussion

Lymphatic drainage of the prostate and seminal vesicles is predictable, with the major route flowing into the obturator and internal iliac nodes [1]. These are the nodes most often evaluated during the initial workup.

Although many cases have been reported of prostate cancer metastasizing to inguinal nodes many years after diagnosis only 1 case has been reported in which inguinal lymphadenopathy was the presenting sign [2].

The patient presented here had not undergone any previous local surgery that might have distorted the lymphatic drainage of the prostate. One possible explanation of such metastasis is that he might have had some aberrant lymphatic drainage of the prostate. Uncommon routes of pelvic lymphatic drainage that have been reported include the gonadal vessels, mesenteric and mesocolic nodes, posterior iliac crest nodes and inferior phrenic nodes [3].

This case emphasizes the importance of a complete physical examination during patient assessment. In addition to the DRE, the clinician should also palpate the inguinal region carefully. Although the possibility of inguinal metastasis of prostate cancer is rare its presence will have important implications for treatment and management (such as the use of hormonal therapy with or without locoregional radiotherapy). The clinician should also consider possible concurrent illnesses that can cause inguinal lymphadenopathy such as infections, inflammatory conditions, lymphoma, melanoma as well as metastatic disease from anal, penile and skin cancers.

References

1. Huang E, Teh BS, Mody DR, Carpenter LS, Butler EB. *Prostate adenocarcinoma presenting with inguinal lymphadenopathy.* Urology 2003; 61: 463xxi-463xxii.
2. Moura FM, Garcia LT, Castro LPF, Ferrari TCA. *Prostate adenocarcinoma manifesting as generalized lymphadenopathy.* Urologic Oncology 2006; 24: 216-219.
3. Slavis SA, Golji H, Miller JB. *Carcinoma of the prostate presenting as inguinal adenopathy.* Cleve Clin J Med 1990; 57**:** 97.