Case Report
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Cervical Lymph Node Metastasis as the Primary Presentation of Prostatic Cancer: A Rare Case Report

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Abstract

Cervical and supraclavicular lymph nodes metastases generally arise from carcinomas of the head and neck. Metastases to cervical lymph nodes from the prostate are very rare. The common site for lymph node metastasis from the prostate is infradiaphragmatic. Herein, we report a 69 year-old male who presented with cervical lymph node enlargement in the setting of prostate cancer. This type of presentation although rare, may warrant investigating the prostate as a source of metastasis in cases where the head and neck are free from carcinoma.

Keywords: Prostatic cancer, Cervical lymphnode, Primary presentation

Introduction

Prostatic adenocarcinoma is one of the most common malignancies in men.[1] The single most common metastatic site for carcinoma of the prostate is the lymph node and the most frequently involved sites are the pelvis and retroperitoneum.[2]

Supradiaphragmatic lymph node metastasis in prostatic cancer is very rare and to the best of our knowledge, very few cases of prostatic cancer with the first presentation of cervical lymph node metastasis have been reported in the English literature.[1]

In this case report, we present a 69-year-old man with cervical lymph node metastasis, as the primary manifestation of his prostatic carcinoma.

Case Report

A 69-year-old man presented with a right painless lymph node enlargement for 2 months duration. His past medical history was unremarkable. He was a heavy smoker for more than 20 years. No history of respiratory difficulty or urinary retention was noted. On physical

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examination, heart and lung were normal. Abdominal examination was unremarkable. The pubic and groin region, external genitalia, scrotum and testes were unremarkable. Digital rectal examination (DRE) was not performed at that time. Physical examination of the head and neck revealed a painless swelling of the right cervical area measuring 2×2 cm.

Other body parts were normal. Blood pressure (130/80), pulse rate (80/min) and respiratory rate (16/min) were normal.

Routine hematological and biochemical laboratory examination was unremarkable.

Fine needle aspiration of the lymph node was in favor of malignancy. Excisional biopsy of the lymph node showed metastatic adenocarcinoma (Figure 1). Immunohistochemistry showed positive cytokeratin and prostatic specific antigen (Figure 2). Prostatic specific antigen (PSA) was also positive. PSA in the serum was also very high (58 ng/ml).

The patient was diagnosed as a case of lymph node metastasis most probably from the prostate. Needle biopsies of the prostate were also positive, with Gleason score (4+ 4=8/10).

The patient did not accept further chemoradiation. However, he is doing well after 6 months since his referral.

Additional studies including bone scan and CT scan of the chest, abdomen and pelvis failed to demonstrate any evidence of malignancy.

Discussion

Most common sites of metastasis for prostatic adenocarcinoma are regional lymph nodes and bones. Other metastatic organs are lung, bladder, liver, adrenal gland and kidney.[3] Lymphatic involvement most frequently involves regional lymph nodes of the retroperitoneum, pelvis, and para-aortic area.[4]

Supradiaphragmatic lymph node involvement is extremely rare in prostatic adenocarcinoma and most of the previous reports have been in the patients with a known previous history of prostatic carcinoma especially with osseous metastasis.[4]

According to the English literature, there have been very few cases of prostatic carcinoma with the primary presentation in the cervical lymph nodes.

Most of the previous cases have been in the left supraclavicular area and all of the cases have been above 50 years of age. It is noteworthy to mention that at the time of presentation, in most of the cases, there were no urinary symptoms and lymphadenopathy was the single presentation.[5] Our patient was a 69-year-old man, with no specific clinical finding except for right cervical lymphadenopathy. Lymph node involvement in

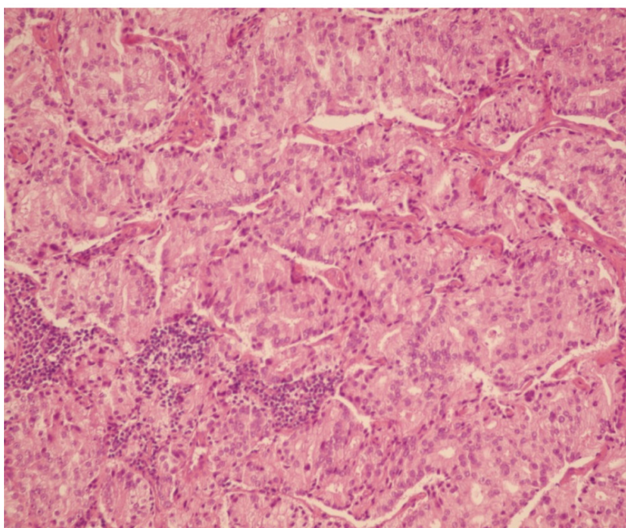

Figure 1. Section from lymph node shows metastatic adenocarcinoma (H&E×250).

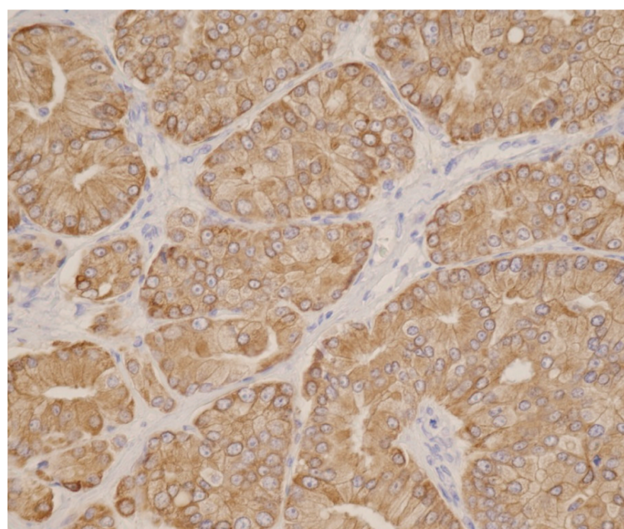

Figure 2. Section from lymph node shows positive glands with PSA antibody (IHC×400).

patients with prostatic cancer is almost uniformly present with wide spread metastasis.[6,7,8] An immunohistochemical study for PSA and also measuring the serum level of PSA are very helpful and diagnostic for the evaluation of possible prostatic origin.[9,10]

We conclude that all male patients above 50 years of age who present with persistent cervical and supraclavicular lymphadenopathy, should have a digital rectal examination. Serum prostatic-specific antigen level estimate at the time of initial presentation can also be useful.

Conflict of Interest

No conflict of interest is declared.

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