Metastatic Prostate Adenocarcinoma Presenting As Inguinal Lymphadenopathy

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Citation

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Abstract

Most common presentation of metastatic adenocarcinoma is either symptomatic bony metastasis or intra-abdominal or pelvic lymph node metastasis. The inguinal lymph node metastasis is very rare. We report an unusual case of metastatic prostate adenocarcinoma presenting as inguinal lymphadenopathy.

INTRODUCTION

Prostate adenocarcinoma is one of the leading cancers in elderly male. Approximately 70% of patients with prostate cancer have metastatic lesions at presentation (1). Most common sites of metastasis are bones and regional lymph nodes. The iliac (external and internal), obturator, pre-sacral and hypogastric nodes, followed by para-aortic lymph nodes are most often involved in the primary lymphatic spread (2, 3). Metastasis to inguinal lymph nodes in the absence of pelvic lymphadenopathy is uncommon (4). We report a rare case of metastatic prostate adenocarcinoma presented as inguinal lymphadenopathy.

CASE REPORT

A 82 years male patient presented to his general physician for gradual swelling of his left lower extremity. On examination, a hard, about 4 cm, irregular, non tender swelling was detected just below the inguinal ligament. A FNAC was done from the lymph node which was suggestive of metastatic adenocarcinoma (Figure 3). He was referred to Department of Urology. On subsequent evaluation, it was found that he was suffering from lower urinary tract symptoms for 2 years. On digital rectal examination, prostate was enlarged, hard and irregular. His serum PSA was 486 ng/ml. Whole body bones scan (Tc99 MDP) revealed increased tracer uptake in multiple thorasic vertebrae, ribs, pelvic bones, trochanteric regions of both femori (Figure 1). TRUS guided prostatic biopsy showed infiltrating adenocarcinoma of prostate (Gleason score = 4 + 3). Contrast enhanced CT scan showed enlarged prostate with heterogeneous attenuation; No significant pelvic or para aortic lymphadenopathy; Extensive sclerotic deposits in pelvic bones (Figure 2).

We discussed with the patient and his relatives regarding the management options and prognosis. We offered him bilateral orchidectomy and androgen receptor blocker (Bicalutamide - 150 mg/day initially, followed by 5o mg/day after bilateral orchidectomy). For bone metastasis, we offered him zolindronic acid in standard regimen along with oral calcium and Vitamin D. He was doing well in subsequent follow up.

DISCUSSION

The prostate adenocarcinoma is predominantly a disease of older men. It most often metastasize to regional lymph nodes (iliac and obturator) and bones by lymphatic and haematogenous spread. Metastases to inguinal lymph nodes are very rare and only few related case reports have been published in medical literature.

The possible explanation of the dissemination mechanism of prostate adenocarcinoma to inguinal lymph nodes is three-fold –

Retrograde lymphatic spread in the presence of para-aortic lymph nodes.
Prostate cancer cells could reach the inguinal canal via the spermatic cord.
Ectopic prostate tissue outside the genital-urinary system may develop carcinoma. (5)

Inguinal lymph nodes do not typically lie in the lymphatic drainage pathway of the prostate; therefore, inguinal lymphadenopathy is an unlikely early manifestation of metastatic prostate adenocarcinoma and is indicator of very advanced stage and dismal prognosis (6,7).

Our patient, who initially presented with inguinal lymphadenopathy, found to harbour metastatic adenocarcinoma, was treated with standard hormonal therapy with bilateral orchidectomy and androgen receptor blocker.

In differential diagnosis of metastatic inguinal nodes apart from scrotal, vaginal, anal canal and cervical cancers, prostate adenocarcinoma also must be kept in mind by physicians. We emphasize that per abdomen examination, digital rectal examination (DRE) and serum PSA shall be performed to rule out primary of unknown origin in case of persistent inguinal lymphadenopathy.

IMAGES

Figure 1

Whole body bone scan showing multiple bony metastases

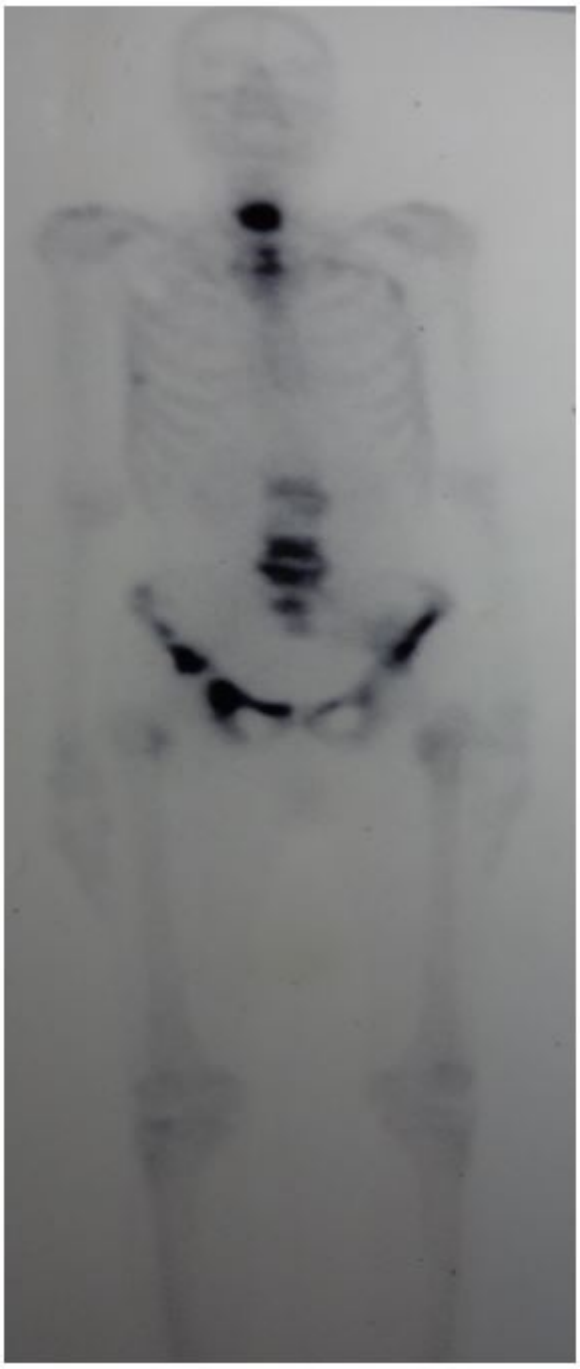


Figure 2

CECT abdomen and pelvis showed absence of pelvic adenopathy and para-aortic lymphadenopathy and large prostate involving seminal vesicles

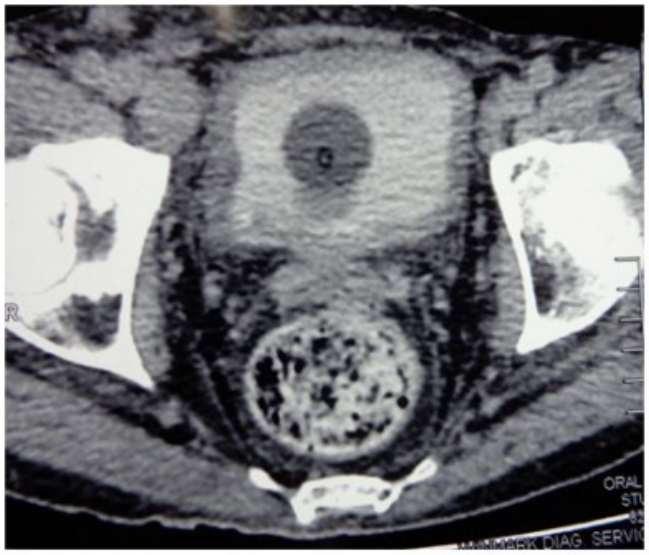
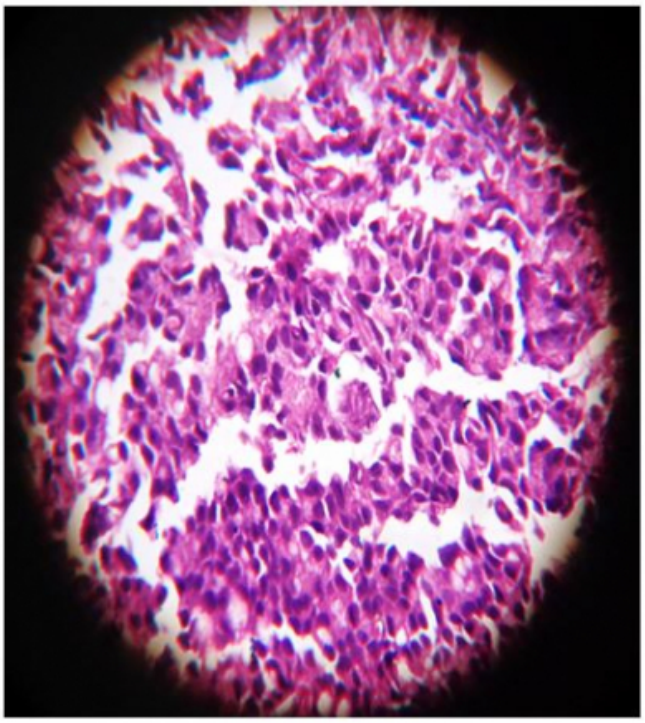


Figure 3

A fine needle biopsy of inguinal lymph node revealed metastatic poorly differentiated adenocarcinoma



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