# Progressive Prostatic Adenocarcinoma: Late Diagnosis

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## INTRODUCTION

Prostate cancer is the seventh leading cause of cancer-related death in Taiwan among men [1]. Most prostate cancer-related deaths are due to advanced disease. Continuous advances have provided a new understanding of the diagnosis, staging, and treatment of metastatic and advanced prostate cancer. The earlier definition of advanced disease (bone metastasis and soft-tissue involvement) has been improved in recent years. This article presents a relatively young patient with early detection of advanced prostate cancer.

## BRIEF HISTORY

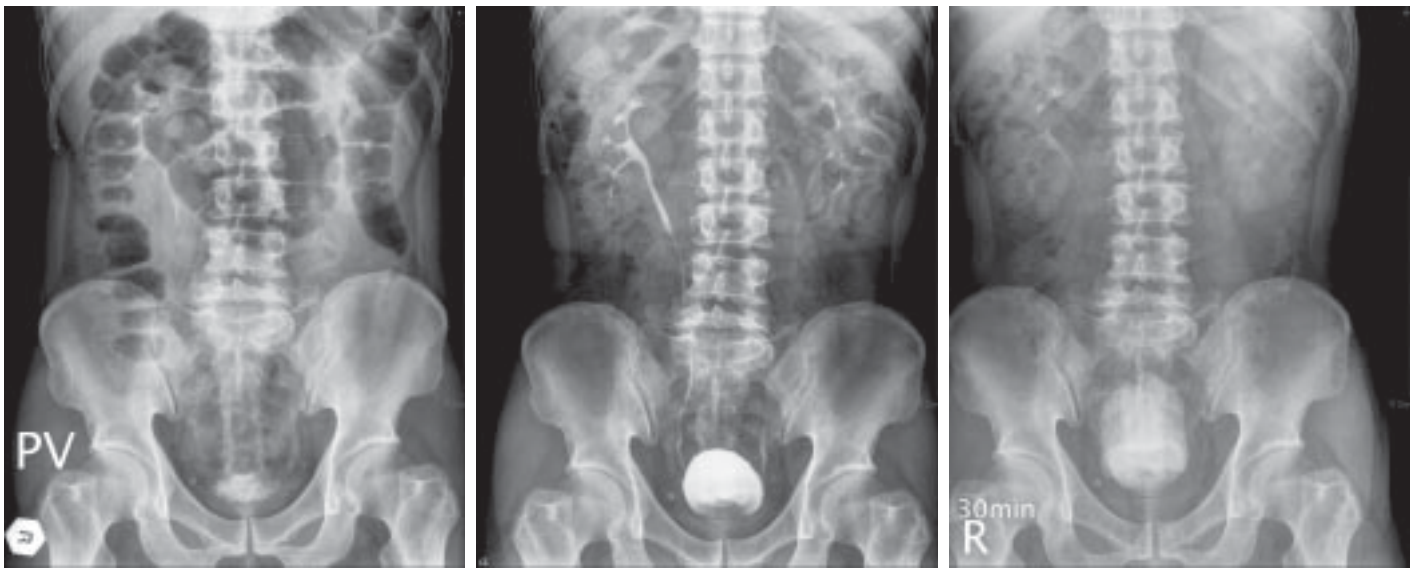
A 51 year-old male, with a history of a lower left ureteral stone, received ureteroscopic manipulation on 25 June 2008 (Fig. 1A). Spordic bouts of hematuria and frequency of urination occurred from July of the same year. Intravenous urography (IVU) revealed negative findings on 30 July 2008 (Fig. 1B).

## CLINICAL COURSE

Hematuria, left flank pain and residual sensation had developed since January 2009. An IVU study was done again and results showed left obstructive nephropathy and, r/o ureteral obstruction due to ureteral lesions or an enlarged prostate (Fig. 1C). Watchful waiting was recommended. The patient's condition was gradually improving but careful observation was still recommended. Constipation, hematuria and difficulty in urination developed from March 2009. An IVU revealed benign prostatic hyperplasia (BPH) with right hydronephrosis and left renal nonvisualization on 6 March 2009 (Fig. 2A). Digital examination revealed a stony hard prostate with multiple nodularities in the right lateral lobe. As a urothelial tumor was suspected, a cystoscopic biopsy was performed the next day on the right lateral lobe of the prostate. An abdominal CT scan was performed at the same time. The pathological report showed an adenocarcinoma of the prostate with a, Gleason score of 4+5=9/10. An abdominal CT revealed that the prostatic tumor had invaded the seminal vesicle and bilateral distal end of the ureters with hydronephrosis, hydroureter, multiple enlarged paraaortic metastatic lymphadenopathy (Fig. 2B). Initial serum prostatic specific abtigen (PSA) was 1775 ng/dl on 6 March 2009. A whole body bone scan suggested multiple bony metastases from prostate cancer, including the clavicle, spine, ribs, pelvic bones as well as bilateral femora and humeri (Fig. 3). Prostatic adenocarcinoma (Stage IV, T4aN1M1) was diagnosed. A Foley catheter was indwelled to enable the release of urine retention and LH-RH analogue was prescribed.

## COMMENT

Routine IVU study is hard to diagnose rapidly progressive malignancy of the prostate in patients with a history of urolithiasis. In addition, the symptoms of urolithiasis may lead to a misdiagnosis of early the prostatic malignancy in young adults. Multiple factors imply poor




A B C

Fig. 1. Serial IVU on 25 June 2008, 30 July 2008 and 11 January 2009 respectively.

prognosis, including young age, high PSA, local and bony metastases. Hormonal therapy and supportive treatment were recommended. PSA doubling time and nadir were monitored to evaluate progress [2-4]. Symptom relief and the maintenance of the quality of life should be a priority.

## REFERENCES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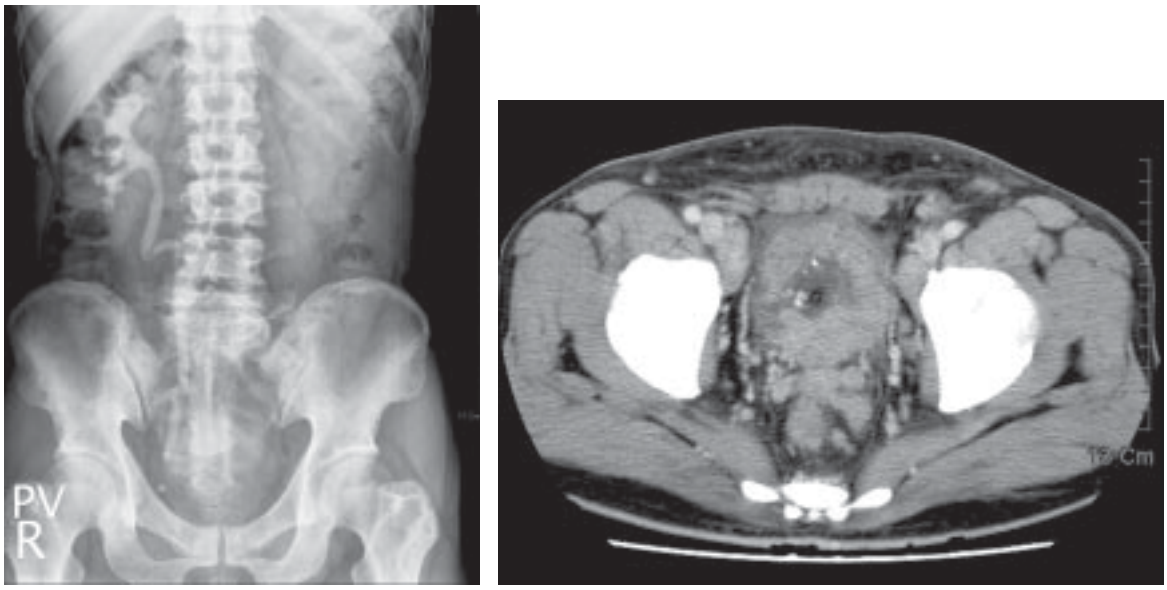


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Fig. 2. IVU on 6 March 2009 and abdominal CT on 7 March 2009.

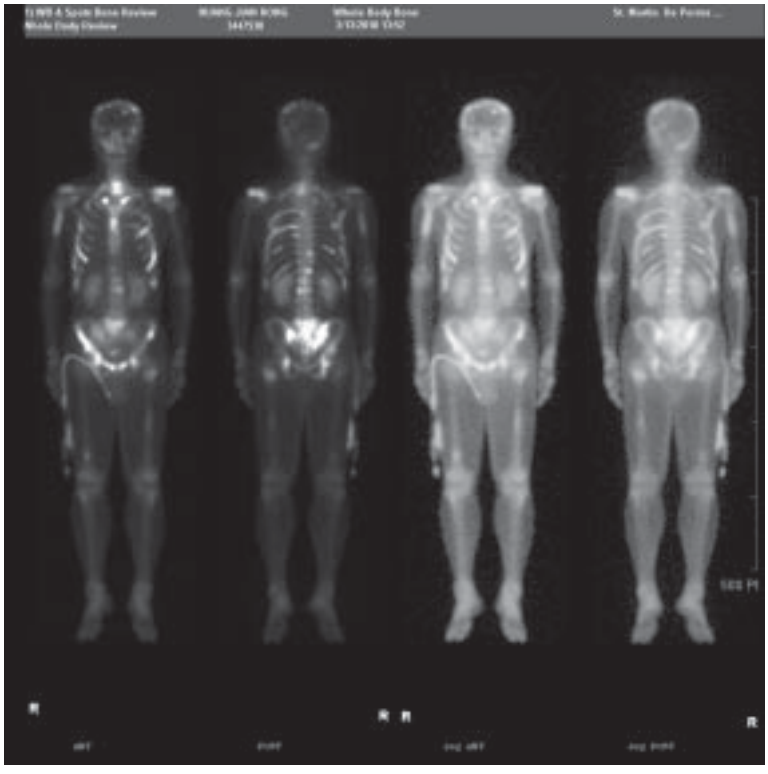

Fig. 3. Whole body bone scan 8 March 2009.