



Squamous cell carcinoma of the prostate with lower urinary tract symptoms: A case report

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ABSTRACT

Primary squamous cell carcinoma of the prostate is a rare tumor. An 80-year-old man was admitted to hospital for half a year because of progressive dysuria and pain. Laboratory examination: TPSA 7.24ng/ml; FPSA 1.610ng/ml,%FreePSA 14.3%. Urine routine was normal. He was treated with thulium laser surgery of the prostate. The pathological result was poorly differentiated squamous cell carcinoma of the prostate. This report is helpful to the clinical manifestation and treatment of the disease.

1. Introduction

Primary prostate squamous cell carcinoma is a rare pathological type of prostate cancer, accounting for less than 1% of the incidence of prostate cancer.¹ Its malignant degree is high, metastasis is early, prognosis is poor, and metastasis and death often occur in a short time. At present, there is no clear treatment plan for the disease due to the low incidence of the disease and little literature research.

2. Case presentation

An 80-year-old man was admitted to hospital for half a year because of progressive dysuria and pain. He used to urinate. In the past year, there have been progressive dysuria, frequent urination, pain and other lower urinary tract symptoms, seriously affecting life. Digital rectal examination: second degree hyperplasia of prostate, shallower central sulcus, tough, smooth, unpalpable nodules, normal sphincter muscle strength. TPSA7.24 ng/ml; FPSA1.610ng/ml. Urine routine is normal. Transrectal ultrasound: benign prostatic hyperplasia was 38ml, and residual urine was 20ml. MRI: benign prostatic hyperplasia, abnormal enhancement of prostate, infection (Fig. 1)? We performed a thulium laser enucleation of the prostate for him. Postoperative pathology revealed poorly differentiated squamous cell carcinoma of the prostate (Fig. 2). Immunohistochemistry: 2024409-A01#:Ki67(+70%), p504s (-), PSA(-), p40(+), CK34(+), CK7(-), GATA3(Weak +),TTF-1(-),p63 (+). Because the patient refused radical surgery and chemotherapy. He was given intermittent local radiotherapy. Nine months after operation,

MRI showed benign prostatic hyperplasia and abnormal enhancement area of the prostate was smaller than before. Laboratory examination: TPSA0.41ng/ml; FPSA0.04ng/ml. The symptoms of dysuria were improved, but the symptoms of micturition stimulation such as frequent urination and pain were not significantly relieved. He is still under follow-up.

3. Discussion

Primary prostate squamous cell carcinoma is a rare prostate tumor, accounting for 0.5%–1% of the incidence of prostate cancer.¹ Its tissue origin is controversial, and most scholars believe that it comes from the urethral epithelium of the prostate, the ducts around the urethra and the prostatic acini. Its clinical manifestation is difficult to distinguish from benign prostatic hyperplasia. It is often characterized by obstructive urinary symptoms, such as acute urinary retention, urinary tract infection and secondary distant metastasis. 56% of the patients had distant metastasis in different parts, such as bone, liver, lung and so on. The urination of our patients was more smooth than that before operation after laser enucleation of the prostate. However, the symptoms of micturition stimulation were not significantly relieved, which may be due to the invasion of tumor tissue and inflammatory reaction. There is no significant increase in prostate specific antigen in all patients with prostate squamous cell carcinoma at present, which brings some difficulties to differential diagnosis. There may be no abnormal findings in digital rectal examination and clinical imaging. The imaging manifestation of hyperechoic prostatic hyperplasia is mistaken for benign

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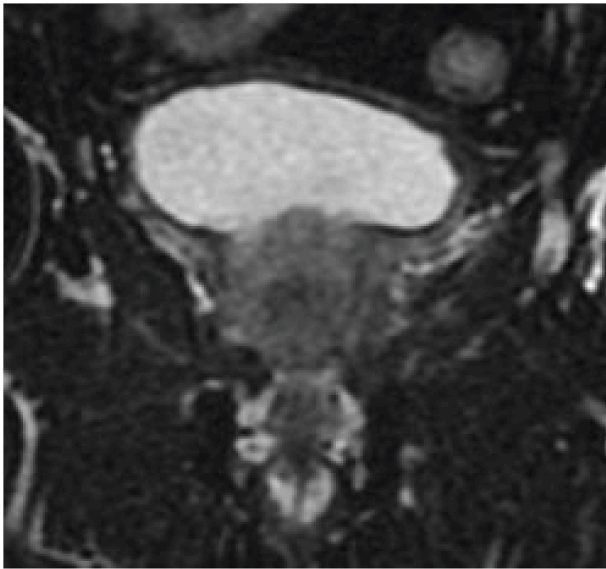


Fig. 1. MRI scan shows prostate hyperplasia, abnormal enhancement of prostate.

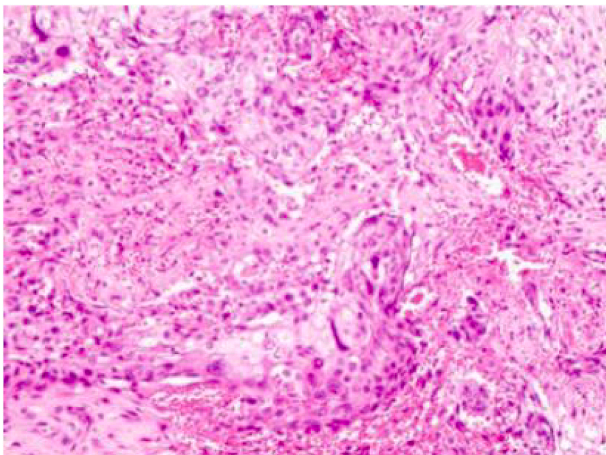


Fig. 2. The result of the pathological test.

prostatic hyperplasia in some patients, thus ignoring the pathological

changes of prostate malignant tumors. Prostate squamous cell carcinoma occurs early in lymph nodes and distant metastasis, such as lung, bone, liver and other organs. The invasiveness is strong, the prognosis is poor, metastasis and death often occur in a short time, and the median survival time is about 14 months.² The choice of treatment for squamous cell carcinoma of the prostate is limited. Unlike preadenocarcinoma, endocrine therapy is ineffective for squamous cell carcinoma of the prostate. Radical resection is still the first choice for early treatment.³ Some studies have found that radiotherapy and chemotherapy may prolong the survival time of patients.⁴ However, some people are skeptical, think that radiotherapy is ineffective, and even think that radiotherapy may cause prostate squamous cell carcinoma lesions.⁵ From our case, it was found that after radiotherapy, the imaging lesions of the patients subsided to a certain extent, and PSA decreased significantly. However, whether it can prolong the survival time of patients will need further follow-up.

4. Conclusion

Squamous cell carcinoma of the prostate is rare and has not been systematically studied. It will be helpful to further understand the occurrence, treatment and prognosis of the tumor with the discovery of more cases.

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