Primary squamous cell carcinoma of the prostate

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Abstract: Squamous cell carcinoma of the prostate is very rare, making less than 1% of all prostatic malignancies. We report a case of primary squamous cell carcinoma involving the prostate in an 80-year-old man with a history of benign prostatic hyperplasia, the patient underwent a transurethral resection prostate (TURP) procedure for progressive urinary obstruction. Biopsy proved the tumor to be squamous cell carcinoma.

Key Words: Primary squamous cell carcinoma; prostate



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An 80-year-old man, with a past medical history of benign prostatic hyperplasia, initially presented with dysuria for three days. Given a benign digital rectal examination and normal serum prostate specific antigen (PSA) levels, he underwent transurethral microwave thermotherapy with minimal relief at an outside institution. Over the ensuing one year, recurrent and progressive urinary symptoms developed. The patient was referred to our institution. An abdominal computed tomography (CT) (Figure 1, arrow) showed a large prostate mass, approximately 51.3 mm in maximal dimension, with uneven density, which was suspected to result in violations of the urethra. Poor visualization of the bladder precluded any diagnosis of bladder cancer. The patient refused radical surgery because the patient's condition was judged to be too weak. Based on this old patient's unique presentation with massively enlarged prostate, a decision to use the transurethral resection prostate (TURP) surgery treatment was made (see Video 1) and chemotherapy was advised. Biopsy revealed a poorly differentiated carcinoma with

squamous features (*Figure 2*). Although this treatment was not adequate to treat his disease, it did provide symptomatic relief for the patient. He received two cycles of cisplatin and 5-fluorouracil but the disease progressed. Subsequently, two cycles of paclitaxel were administered with radiographic and clinical stabilization of disease for more than 6 months. The histogenesis of squamous cell carcinoma has long been a topic for debate. Some have thought the origin to be of prostatic urethral urothelium, although others believe it arises from the transitional epithelium of periurethral ducts or the basal cells of prostatic acini. Primary squamous cell carcinoma of the prostate continues to be an infrequent and aggressive malignancy found in less than 1% of men worldwide.

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Figure 1 An abdominal CT scan shows a large neoplasm (arrow) with heterogeneous enhancement in the prostate extending into the bladder base

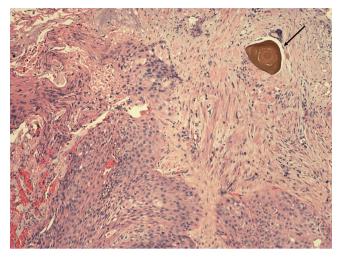
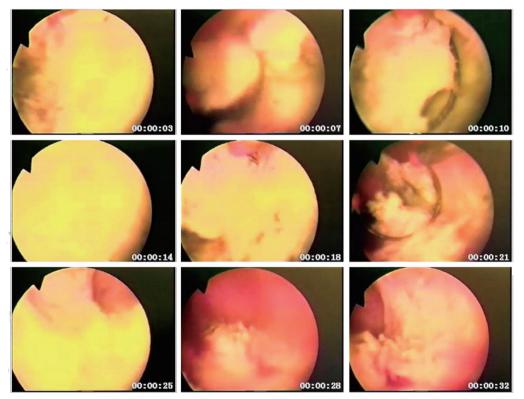


Figure 2 Pathological results (H&E stain ×100) reveal squamous metaplasia of the prostatic glands (arrow) and the infiltrating tumor forming nests and cords



Video 1 The transurethral resection prostate surgery procedure

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