

A RARE CASE OF PRIMARY SQUAMOUS CELL CARCINOMA OF THE PROSTATE

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ABSTRACT

The Prostate's primary squamous cell carcinoma is a rare clinicopathological entity with fewer than 100 cases reported in the literature. It behaves more aggressively compared to other types of prostate cancer. The optimal management is not well known. A 70-year older man complained of Acute Urinary Retention. Digital Rectal Examination and diagnostic imaging studies indicated a prostatic malignancy, although serum prostate-specific antigen (PSA) was normal. Biopsy specimens revealed SCC. The patient underwent TURP, and Radiotherapy was given. Patient obstructive symptoms improved after Turp and Radiation therapy.

KEYWORDS : prostate, TURP, radiotherapy, squamous cell carcinoma.

INTRODUCTION

Primary SCC of prostate is a rare tumor, making up 0.5% to 1% of all prostate carcinomas¹. Presenting symptoms can range from lower urinary tract symptoms (i.e., obstructive) to bony metastases. It is typically described as aggressive cancer, with a median postdiagnosis survival of approximately 14 months². No definitive treatment exists, although varying approaches, including surgical intervention, multimodal chemotherapy, and radiation therapy, have been implemented without a durable response.

Case

A 70-year-old man presented with in our emergency with acute urinary retention. History of dysuria, hematuria present.

No h/o DM/HYPERTENSION/ASTHMA/TUBERCULOSIS/SURGERY

Physical examination was normal.

DRE- Grade III hard irregular prostatomegaly present, median sulcus obliterated, multiple nodules present.

Serum PSA values were within the normal range (1.0 ng/dL).

USG Prostate showed a 6.5 x 6.2 x 5.6 cm hypoechoic prostate with internal echoes.

Chest X-ray and X-ray KUB were normal.

A Trucut needle biopsy was done and it revealed SCC.

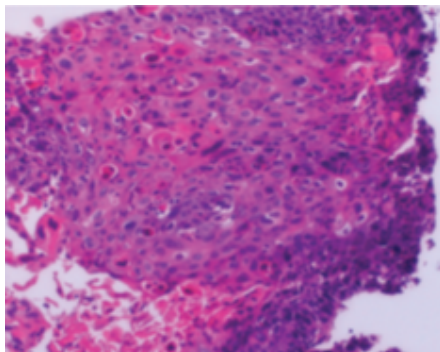


Fig1: Biopsy From The Prostate Showing Squamous Cell Carcinoma On H&e Stain (high Power Microscopy).

Urine cytology was negative for malignant cells.

Cect Of Abdomen And Pelvis- demonstrated an irregularly enlarged prostate (5.5 * 5.5 *4 cm) with heterogeneous enhancement with contrast with a hyperdense mass in the left peripheral zone without any nodal enlargement. (Fig. 2).

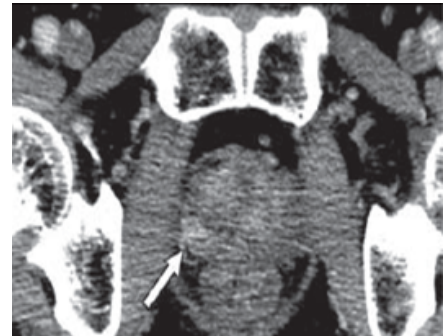


Fig:2 - Contrast-enhanced Ct Image Of The Patient With Biopsy-proven Prostate Cancer Show Abnormal Enhancement (arrow) Suggesting The Presence Of A Tumor.

Magnetic Resonance Imaging (MRI) showed loss of boundary between the transition zone and the peripheral zone, and the signal intensity was decreased in the peripheral zone on the T2-weighted image (Fig. 3).

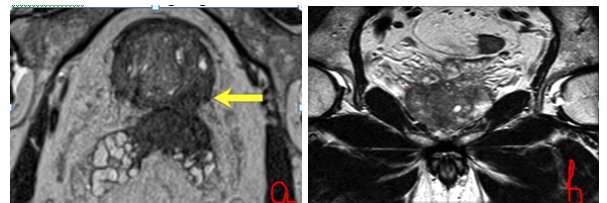


Fig 3- MRI (a)- Axial, (b)- Coronal T2-weighted Images Demonstrate A T2-hypointense Soft Tissue Mass In The Left Peripheral Zone And Extension Into The Seminal Vesicle(yellow Arrow).

By thorough investigations, primary or metastatic lesions in the respiratory organs and the alimentary tract were excluded. The bone scan was normal.

The patient was diagnosed as having stage T3cN0M0 primary

SCC of the Prostate. The patient underwent TURP and Radiotherapy as he did not wish for Radical Surgery. The patient remains asymptomatic at six mo followup.

DISCUSSION

Primary SCC of prostate is a rare tumor, making up 0.5% to 1% of all prostate carcinomas¹. Squamous metaplasia occurs in Prostate in chronic prostatitis, around prostatic infarcts, and after estrogen therapy or radiation therapy². Mott¹ suggested the strict criteria for the diagnosis of primary prostatic SCC: (i) Must be clear malignant neoplasm as assessed by invasion, disordered growth, and cellular anaplasia; (ii) definite squamous features of keratinization, squamous pearls, and/or numerous distinct intercellular bridges; (iii) no prior estrogen therapy; (iv) a lack of any glandular or acinar pattern; and (v) an absence of primary squamous cancer elsewhere, particularly in the bladder.

Origin of Prostatic SCC is presumed from the basal cells of prostatic acini and the transitional epithelial lining major. Theoretically, the tumor that develops from the basal cells of prostatic acini may resemble common prostatic adenocarcinoma and would-be sex hormone responsive⁴. The usual presentation is bladder outlet obstruction. Gland Consistency can be variable. Even with metastasis, Serum PSA and acid phosphatase levels are within normal limits. Therefore, cases can be misdiagnosed preoperatively as benign prostatic enlargement (BPE)⁵. But in Prostatic SCC, SCC antigen is elevated in the blood and values parallels the effect of treatment or progression of prostatic squamous carcinoma⁶. Prostatic SCC is very aggressive and early metastatic spread is not uncommon. This cancer is independent of androgen. Post-diagnosis average survival is estimated to be 14 months. Surgical treatment and multimodal approaches are most commonly used with varying degrees of success. Chemotherapy with PEP, CDDP, methotrexate, bleomycin (BLM), have been tried, based on squamous head and neck carcinoma, but the results indicate that the treatments do not seem to be ineffective. Radiation therapy also seems to be ineffective. In Japan, the longest survivor of this cancer, who had a tiny SCC suburethral, has been free of recurrence for six years since he underwent prostatectomy for a BPH⁷. A few cases may be susceptible to anticancer drugs and radiation. But, a complete cure is not expected unless the disease is organ-confined and radical extirpation is performed⁸.

CONCLUSION:

The Prostate's primary squamous cell carcinoma is a rare clinicopathological entity with fewer than 100 cases reported in the literature. It behaves more aggressively compared with other types of prostate cancer. The optimal management is not well known. Based on our patient's wish, a decision to use TURP and radiation therapy was made. Although this treatment was not curative for him, it did provide symptomatic relief for the patient, and he remains asymptomatic at six mo of follow up.

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