

Primary Squamous Cell Carcinoma of Prostate With Direct Extension to Bladder

Sahel Valadan Tahbaz, Hossein Yahyazadeh, Saadat Molanaei, Marziyeh Beheshti

Clinical Cancer Research Center, Milad General Hospital, Tehran, Iran

Received: 12 Jul. 2021; Accepted: 11 Mar. 2022

Abstract- SCC of the prostate is different from other adenocarcinomas in its treatment and prognosis. Here, the patient is a 57-year-old man with benign prostatic hyperplasia that underwent a prostatectomy and, after one month with hematuria and another follow-up radical cystoprostatectomy with lymphadenectomy and urethrectomy. After recovery, the patient experienced radiotherapy and chemotherapy sessions. So, from a review of other literature, we present our case report of squamous cell carcinoma of the prostate that is more aggressive than adenocarcinoma.

© 2022 Tehran University of Medical Sciences. All rights reserved.

Acta Med Iran 2022;60(5):313-315.

Keywords: Squamous cell carcinoma; Prostate cancer; Primary cancer; Radical cystectomy; Prostatectomy

Introduction

SCC of the prostate is an extremely rare tumor that causes 0.5% to 1% of all prostate carcinomas, and its etiology is not yet well understood (1). In this tumor category, because of the low rate of malignancy, conventional treatment and their response for prognosis and progression is very poor (2). Many clinical methodologies are usually used but with no strong response (3-6). Regarding many previous reports, although there is low information on clinical presentation, diagnostic examination, and treatment or the prognosis is usually collected. There are no exactly positive and effective results in treatment (7). Structurally this type can be in pure or adenocarcinoma form and urothelial carcinoma (5,8). So here, we describe a case report of primary squamous cell carcinoma of the prostate with direct primary drug resistance patterns in OCD extension to the bladder.

Case Report

A 57-year-old male was admitted to Milad General Hospital, with hematuria and urinary frequency, with a

high creatinine level rate (1.65 mg/dl; normal rate: 0.7-1.4) on 8 October 2019. The doctor performed a clinical examination to determine the cause, and due to a normal PSA level, the patient was admitted with a diagnosis of BPH (Benign prostatic hyperplasia). Before the patient has surgery, an ultrasound confirmed that the patient's bladder is not involved. Ultrasound of kidneys, bladder, and prostate took from the patient showed the normal size of both kidneys. The bladder was observed without any vegetative or luminal lesion, and the prostate volume is 104 mL large and heterochronic. The patient underwent an open prostatectomy, and 76 gr of the prostate was removed. The pathology confirmed the diagnosis SCC of prostate and histologic grade is poorly differentiated, and IHC test results (P63=Positive) but negative stain for PSA confirmed the squamous cell carcinoma (Figure 1).

The patient came again one month after prostatectomy with recurrent hematuria, and according to the MRI performed by the patient, an abnormally enlarged, thick-walled prostate mass with posterior and lower bladder involvement and anterior and seminal vesicle from the posterior to the sound of neoplastic changes in the prostate can be seen.

Corresponding Author: S. Valadan Tahbaz

Clinical Cancer Research Center, Milad General Hospital, Tehran, Iran
Tel: +98 2188621026, Fax: +98 2188621026, E-mail address: valadan@ymail.com

Copyright © 2022 Tehran University of Medical Sciences. Published by Tehran University of Medical Sciences

This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International license (<https://creativecommons.org/licenses/by-nc/4.0/>). Non-commercial uses of the work are permitted, provided the original work is properly cited

Primary squamous cell carcinoma of the prostate

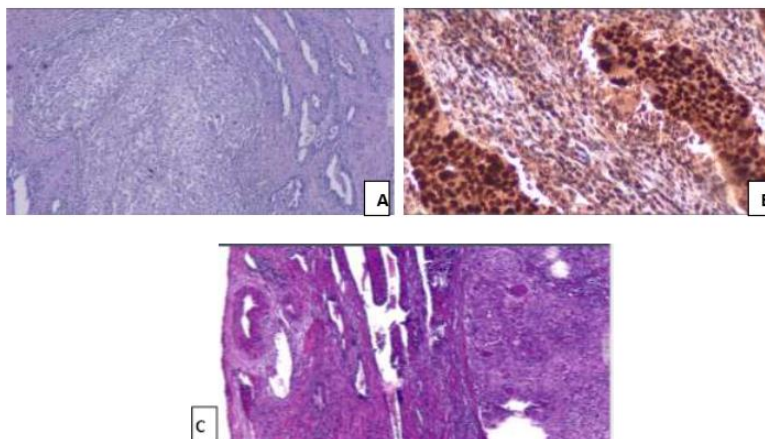


Figure 1. (A), The pathologic features of the prostate tissue tumor (H and E stain, $\times 40$); (B), P63 biomarker in tumor of prostate tissue is positive (H and E stain, $\times 100$); (C), prostate tumor; the microphotograph showed poorly differentiated squamous cell carcinoma of prostate origin

Follow-up on non-metastasis and involvement of different organs and distant areas for the patient was performed by lung CT scan, abdominal and pelvic computed tomography, and bone scan. There was nothing in the bone scan and CT scan of the lung reports, but abdominal and pelvic computed tomography showed increased bladder mucosal thickening to the state of the circumference with irregular surface, the prostate remains, and a bladder and the lymph nodes of the pelvis involved. According to the clinical reports, the second procedure performed was a radical cystoprostatectomy with pelvic lymphadenectomy, and it was a local conflict. According to the pathology report, the tumor is poorly differentiated and involves about 2/3 of bladder wall thickness; inferior and lower lateral margins are involved; two out of three dissected lymph nodes are involved by the tumor, and in pelvic tissue, unremarkable seminal vesicles tissue and a part of the ureter are included too. After surgery and a little recovery, the patient underwent radiotherapy and chemotherapy sessions.

Discussion

Approval of the diagnosis of squamous cell carcinoma of the prostate from prostatic adenocarcinoma is on histologic examination and PSA Level only (3). Mott *et al.*, (1) recommended some criteria for diagnosis, for example, Neoplasm malignancy invasion, and structure of tumor growth, cellular anaplasia, keratinization features, in a different place, particularly in the bladder (6,9). In a study by In Braslis *et al.*, like in our case, squamous transformation usually takes place after radiation, or hormonal

treatment tended to be associated with high-grade adenocarcinomas (1,6,8,10). Malik *et al.*, (2) reported osseous metastasis of pelvic bone and sacrum, but the metastasis pattern was not noted. Radical surgery can be a useful option for primary or salvage therapy for local recurrence tumors.

References

1. Mott LJ. Squamous cell carcinoma of the prostate: report of 2 cases and review of the literature. *J Urol* 1979;121:833-5.
2. Malik RD, Dakwar G, Hardee ME, Sanfilippo NJ, Rosenkrantz AB, Taneja SS. Squamous cell carcinoma of the prostate. *Rev Urol* 2011;13:56-60.
3. Biswas T, Podder T, Lepera PA, Walker P. Primary squamous cell carcinoma of the prostate: a case report of a rare clinical entity. *Future Sci OA* 2015;1:FSO18.
4. Nabi G, Ansari MS, Singh I, Sharma MC, Dogra PN. Primary squamous cell carcinoma of the prostate: a rare clinicopathological entity. Report of 2 cases and review of literature. *Urol Int* 2001;66:216-9.
5. Munoz F, Franco P, Ciammella P, Clerico M, Giudici M, Filippi AR, et al. Squamous cell carcinoma of the prostate: long-term survival after combined chemoradiation. *Radiat Oncol* 2007;2:15.
6. Imamura M, Nishiyama H, Ohmori K, Nishimura K. Squamous cell carcinoma of the prostate without evidence of recurrence 5 years after operation. *Urol Int* 2000;65:122-4.
7. Moskovitz B, Munichor M, Bolker M, Livne PM. Squamous cell carcinoma of the prostate. *Urol Int* 1993;51:181-3.
8. Majeed F, Javed TA, Khan AU, Koerber RK. Primary

- squamous cell carcinoma of the prostate: a novel chemotherapy regimen. *J Urol* 2002;168:640.
9. Little NA, Wiener JS, Walther PJ, Paulson DF, Anderson EE. Squamous cell carcinoma of the prostate: 2 cases of a rare malignancy and review of the literature. *J Urol* 1993;149:137-9
 10. Braslis KG, Davi RC, Nelson E, Civantos F, Soloway MS. Squamous cell carcinoma of the prostate: a transformation from adenocarcinoma after the use of a luteinizing hormone-releasing hormone agonist and flutamide. *Urology* 1995;45:329-31.