### OLGU SUNUMU/ CASE REPORT

# Two Malignant Neoplasms in a Radical Cystectomy Specimen: A Case Report

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#### Abstract

Radical cystectomy is a surgical treatment procedure for invasive bladder cancer. In this operation, the bladder, surrounding organs and lymph nodes are removed from the patient.

In this case, radical cystectomy was performed on a patient with a diagnosis of urethral carcinoma and histopathological evaluation was performed on the specimen.

In conclusion, this case was interesting because a prostate adenokarsinoma much larger than the bladder tumor was detected in the patient who did not come to regular follow-ups with the diagnosis of bladder tumor and also prostate adenocarcinoma metastasis was detected in the metastatic lymph node.

Key Words: Radical cystectomy, urothelial carcinoma, prostate carcinoma

## Radikal Sistektomi Spesmeninde Iki Malign Neoplazm: Olgu Sunumu Özet

Radikal sistektomi invaziv mesane kanserinde uygulanan cerrahi tedavi prosedürüdür. Bu operasyonda hastadan mesane, çevreleyen organlar ve lenf nodları birlikte çıkarılmaktadır.

Bu olguda üretelyal karsinom tanılı hastaya radikal sistektomi operasyonu uygulanmıştır ve spesmene histopatolojik değerlendirme yapılmıştır.

Sonuç olarak bu olgu, mesane tümörü tanısıyla düzenli takiplere gelmeyen hastada mesane tümöründen çok daha büyük prostat malign neoplazmı saptanması ve metastatik lenf nodununda prostat adenokarsinom metastazı olması nedeniyle ilginç bulunmuştur.

Anahtar Kelimeler: Katarakt, Prevalans, Görme engelliliği, Türkiye

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#### Introduction

Radical cystectomy is a surgical treatment procedure for invasive bladder cancer. In this operation, the bladder, surrounding organs and lymph nodes are removed together from the patient. The prostate gland and seminal vesicles are removed in men, and uterus, ovaries and some of the vagina are removed in women (1). It is possible to encounter surprises in the pathological examination after the operation.

# Case

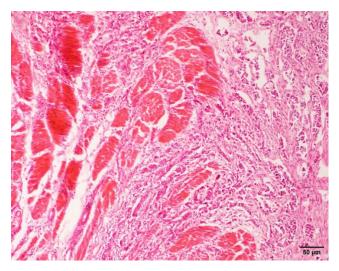
A 56-year-old male patient who was diagnosed with non-invasive urothelial carcinoma (pT1) in 2017 did not go to his routine follow-ups properly. He was diagnosed with invasive urothelial Ca (pT2) in our hospital, when he last visited in May 2021 and then the patient was informed that radical cystectomy should be performed.

In the lower abdomen computed tomography performed on the patient, an irregular wall thickening reaching 11mm in thickness was observed in the anteroinferior part of the bladder. The prostate and bilateral seminal vesicles were seen in natural appearance. A 30x16mm surrenal adenoma on the left side of the abdomen was also detected in the abdominal computed tomography.

The patient who applied to our hospital underwent radical cystectomy and ileal loop diversion operation due to detrusor muscle invasion.

In the macroscopic examination performed in our pathology department; When the cystectomy material was opened from the anterior wall, irregularly shaped areas were noted in its lumen, and a solid tumoral area (2x1.5 cm) was observed at the junction of the anteriorposterior wall in the upper part of cavity. Macroscopically, the surgical margins of the bladder were intact. Nodular areas were noted in the examination of the prostate tissue, and the entire prostate tissue was sampled.

Microscopically, atypical neoplastic cells were observed in the bladder. Irregularly shaped nests and layers of high-grade urothelial carcinoma were observed in the area of neoplasm in the bladder. The neoplasm has invaded the detrusor muscle (muscularis propria) (pT2).



**Figure 1.** Bladder high grade urothelial carcinoma-muscle invasion, HEX100

Among the benign glands in the prostate tissue, small, atypical glands (Gleason grade:3) and occasionally fused glands (Gleason grade:4) were detected. In malignant prostate glands, increased size of nuclei, hyperchromasia, prominence of nucleoli and disappearance of basal cell layer were seen. The neoplasm observed in the prostate tissue was named as prostate adenocarcinoma.

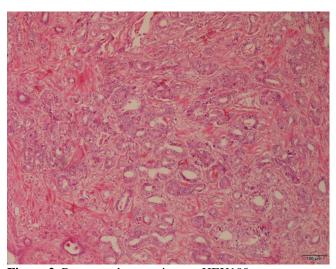
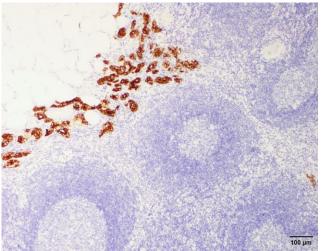


Figure 2. Prostate adenocarcinoma, HEX100

This case was reported as urothelial carcinoma (pT2) +prostate adenocarcinoma (Gleason grade:4+3). Tumor size in prostate tissue was measured microscopically as 4x4cm, 70% of prostate tissue was infiltrated with prostate adenocarcinoma. Perivascular invasion was positive and surgical margins were intact. One metastatic lymph node (consistent with prostate adenocarcinoma) was also detected in the case. PSA

positive, HMWCK negative staining was demonstrated in this lymph node with immunohistochemical evaluation.



**Figure 3.** Prostate adenocarcinoma, metastatic lymph node, PSAX100

#### **Discussion**

It is known that the most common type of bladder cancer is urothelial carcinoma (2). Non-urothelial tumors of the bladder are rare and it constitutes less than 5% of all bladder malignancies (3).

In our case, urothelial neoplasm was observed in the bladder. However, it was understood that the main symptoms causing the complaint in the case were prostate adenocarcinoma rather than bladder tumor. According to Siegel et al., bladder cancer disproportionately affects men and the elderly, and the median age at diagnosis is 69 in men and 71 in women (4).

In our case, the patient's age was below the literature average. Urothelial carcinoma of the urinary bladder is categorized as non-muscle invasive disease (Ta, T1 and Tis), muscle invasive disease (T2), metastatic disease and each clinical spectrum differs in prognosis, management, and treatment strategy (5). Radical cystectomy is the standard treatment for non-metastatic invasive bladder cancer and is curative in most patients with localized disease (6).

# Conclusion

Prostate invasion may occur in bladder cancers, so prostate tissue is also removed. In this case, the neoplasm observed in the prostate was not bladder urothelial carcinoma invasion, it was detected as prostate adenocarcinoma. This case was found interesting because a prostate adenocarcinoma much

larger than the bladder urothelial carcinoma was detected and prostate adenocarcinoma metastasis was found in the metastatic lymph node.

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out by all participants.

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**Author Contributions:** 

Concept: M.A.Ç; Design: M.A.Ç; Literature search: M.A.Ç; Data Collection and Processing: M.A.Ç; Analysis or Interpretation: M.A.Ç; Writing: M.A.Ç; Conflict of Interest: No conflict of interest was

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