

## Synchronous bladder tumors in a married couple: Effect of treatment options on quality of life

*Evli çiftte eş zamanlı mesane tümörü: Tedavi seçeneklerinin hayat kalitesi üzerine etkisi*

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### ABSTRACT

Bladder carcinoma is frequently seen in the geriatric age group. Environmental factors and life style are risk factors in the development of bladder carcinoma. Smoking is one of the most important risk factor and passive smoking should be taken into consideration in married couples. Additionally quality of life is now a well-recognized and important outcome measure that should be considered when deciding the treatment option for bladder cancer. In this case presentation, risk factors and environmental factors in the development of synchronous bladder tumors in a couple married for 43 years are evaluated. We would also like to emphasize the effects of treatments for bladder tumors with and without muscle invasion on the quality of life of the geriatric population in need of home care.

**Key words:** Bladder cancer, treatment, elderly, quality of life

### INTRODUCTION

Bladder carcinoma is frequently seen in the geriatric population. It is the second most seen malignancy in the genitourinary tract and the fourth most common tumor diagnosed in the male population; its incidence is increasing in Western societies [1]. In the United States, every year 73000 new cases are diagnosed and 14000 deaths are predicted from bladder carcinoma [2]. Bladder carcinoma is four times more common in the male population. The average age of diagnosis in the United States is 73 [3].

In this study, we evaluated life style and environmental factors in a couple married for 43 years, with synchronous bladder tumors. We would also like to emphasize the effects of treatments for blad-

### ÖZET

Mesane kanseri, geriatric yaş grubunda sık görülen bir hastalıktır. Mesane tümörü gelişiminde çevresel faktörler ve yaşam tarzı risk faktörleri olarak tanımlanmıştır. Özellikle sigara kullanımı en önemli risk faktörüdür ve evli çiftlerde pasif içicilik göz ardı edilmektedir. Ayrıca mesane kanserinin tedavi seçeneğine karar verir iken tedavinin hayat kalitesi üzerine etkileri dikkate alınmalıdır. Bu olgu sunumunda kırk üç yıllık evli çiftte eş zamanlı görülen mesane tümörünün eşliğinde risk faktörlerini ve çevresel etkenleri değerlendirdik. Ayrıca kasa invaze olan ve olmayan mesane tümörü tedavilerinin bakıma muhtaç geriatric yaş grubunda yaşam kalitesi üzerine etkilerini vurgulamayı amaçladık.

**Anahtar kelimeler:** Mesane kanseri, tedavi, yaşlılık, hayat kalitesi

der tumors with and without muscle invasion on the quality of life of the geriatric population in need of home care.

### CASE 1

76-year-old male patient who was diagnosed with a bladder tumor after a year-long intermittent macroscopic hematuria complaint. Histopathological evaluation of the tumor after transurethral resection (TUR) reported a high grade, transitional epithelial carcinoma with invasion into the muscle. In medical scans no metastasis was detected and the patient was treated with radical cysto-prostatectomy and anileal loop with urinary diversion. At the postoperative 6th month follow up, the patient had 1500cc

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urinary output, was unable to manage his urostomy care and a urostomy nurse was weekly caring for his urostomy and urostomy bag. The patient had coronary artery disease. A routine check-up showed no pathologies, but the patient indicated that he could not go on long trips; he had isolated himself socially and was dependent on his urostomy care nurse. The patient's quality of life was evaluated using the EORTC QLQ-C30 questionnaire, and his quality of life score was found to be 3 (very bad:1, perfect:7) [4].

The patient's medical history showed that he had smoked for 50 years, but not for the last 10 years. He had been employed in a tire production factory abroad.

## CASE 2

70-year-old female patient who was followed up for low grade papillary urothelial carcinoma without muscle invasion for 6 years. She was diagnosed with a bladder tumor 5 years prior to her husband. Three years ago, she was treated with intravesical BCG for 6 months. A year after that, due to relapse, maintenance BCG treatment was started and the patient is still followed up. Due to frequent relapses under maintenance treatment, the patient was followed up with cystoscopy every 3 months. The patient had frequent macroscopic hematuria complaints because she was under anticoagulant treatment for her coronary artery disease. The patient has had long term irritative and lower urinary system complaints after BCG treatments.

The patient indicated that cystoscopy follow ups and intravesical treatments, together with her husband's surgical treatment for bladder carcinoma, affected her social life adversely. The patient's quality of life was evaluated using the EORTC QLQ-C30 questionnaire and her quality of life score was found to be 2 (very bad:1, perfect:7).

The patient's history showed 3 years of factory employment abroad in her 20s; she did not smoke but was a passive smoker due to her husband.

## DISCUSSION

As the geriatric population increases, together with the increase in life expectancy, bladder tumor pa-

tients who need treatment and follow up are also increasing in number. There are many risk factors in the development of bladder carcinoma including social, environmental, occupational and genetic factors and eating habits. The risk for developing bladder carcinoma is increased 3-4 fold in the smoking population [5,6]. Occupational factors include chemical, petrol and dye industries. Benzidine, beta naphthylamine and 4-aminobiphenyl are important industrial carcinogens. Dietary factors include alcohol and caffeine [7]. In geriatric age patients the treatment of bladder tumors can be troublesome due to comorbidities and critical physiological changes.

This couple was married for 43 years and did not have any comorbidity other than coronary artery disease, but both had occupational chemical exposure at some time in their lives. One had a long term smoking history and the other had a second hand smoking history, which is very important for bladder tumor etiology.

As in our study, married couples' synchronous bladder tumors with similar histopathology has been reported in the literature [8]. This shows that environmental factors and dietary factors are of great importance.

With aging, many organs' and systems' physiology are adversely affected. These changes deplete the physiological reserve and hinder the patient's ability to endure chemotherapy, radiotherapy or surgical treatment procedures. Due to these changes in the geriatric age group, quality of life can easily deteriorate during cancer treatment.

Bladder carcinoma requires long term follow-up and treatment. Quality of life is affected by this. Follow-up cystoscopies, transurethral resections for treatment, intra-bladder drug treatments and radical procedures for invasive bladder carcinoma cause major deterioration in quality of life [9]. In the patient with bladder carcinoma without muscle invasion, a 6 year long follow-up showed a decrease in quality of life and a limited social life. Her husband's radical surgery for the same disease negatively influenced her both physically and psychologically.

Today, the treatment for non-metastatic bladder carcinoma with muscle invasion is radical cystectomy and urinary diversion. Cystectomy and uri-

nary diversion is a procedure that takes a heavy toll on physiological reserves. After this procedure, the physical, psychological and social life of the patient is affected. A patient's physical quality of life score may be high after cystectomy, while his or her psychological condition, level of independence, social life and inter-personal relationships may be below; this shows that physical treatment only for these patients is not enough. Psychological and social evaluations are also needed. Like the married couple discussed here, couples having the same cancer with different stages, even though seen as an advantage for support, both need to undergo severe control measures and follow-ups.

In conclusion, environmental factors and dietary habits affect the development of bladder carcinoma. In couples who shared the same physical environment and were exposed to similar environmental factors for long periods of time, bladder carcinoma can be seen synchronously. Although supporting each other for the same disease is seen as an advantage, due to the decrease in the quality of life from cancer itself, problems inherent in the geriatric age group require close medical follow-up. In the geriatric age group, not only the physical treatment of the patient in the health care facility but also home care services, psychological support, family moti-

vation and the education of family members are of great importance.

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