

EARLY ONSET OF VULVAR CANCER AND MULTIPLE SCLEROSIS THERAPY CASE REPORT

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Summary

Vulvar cancer is a rare disease among young women. Risk factors for vulvar cancer are smoking, chronic dermatitis and human papilloma virus infection. However, no correlation between multiple sclerosis and increased risk of cancer has been established.

We present a case of vulvar cancer in 35 year old women with multiple sclerosis. Radical vulvectomy with right-sided inguinofemoral lymphadenectomy was performed. Pathohistological analysis confirmed the diagnosis of a squamous cell carcinoma, grade II, International Federation of Gynecology and Obstetrics (FIGO) IB. Adjuvant radiotherapy was not indicated. After two years of follow up, there was no evidence of the recurrence.

The occurrence of vulvar cancer in multiple sclerosis patients may be coincidental. Nevertheless, the long term use of immunomodulatory drugs in multiple sclerosis and incidence of cancer may be associated.

KEY WORDS: *vulvar cancer, multiple sclerosis, risk factors, case report*

KARCINOM STIDNICE KOD MLADJE ŽENE I TERAPIJA MULTIPLE SKLEROZE: PRIKAZ SLUČAJA

Sažetak

Karcinom stidnice je rijetka bolest u mladim ženama. Rizikni faktori za karcinom stidnice su pušenje, kronični dermatitis i infekcija humanim papiloma virusom. Nije dokazana povezanost između multiple skleroze i povećanog rizika za razvoj karcinoma.

Opisujemo slučaj karcinoma stidnice u 35-godišnje žene koja boluje od multiple skleroze. Učinjena je radikalna vulvektomija s desnostranom inguinofemoralnom limfadenektomijom. Patohistološka analiza potvrdila je dijagnozu planocelularnog karcinoma, gradus II, FIGO 1B. Adjuvantna radioterapija nije bila indicirana. Nakon dvije godine praćenja, nema znakova povrata bolesti.

Pojava karcinoma stidnice u mlade bolesnice s multiplom sklerozom, može biti koincidencija. Moguća je povezanost dugotrajnog korištenja imunomodulatornih lijekova u multiploj sklerozi i incidencije karcinoma.

KLJUČNE RIJEČI: *karcinom stidnice, multipla skleroza, faktori rizika, prikaz slučaja*

INTRODUCTION

Vulvar cancer makes five percent of malignancies of the female genital tract and is the fourth

most common gynecologic cancer. Within the United States, almost 4900 cases are diagnosed each year (1). Vulvar cancer usually occurs in post-menopausal period in the seventh and eighth

decade of life (1, 2). However, the average age of occurrence of vulvar cancer seems to have moved from 69 to 55 years from 1979 to 1993 (3). Women who develop the disease before turning 40 mostly have one of the risk factors, such as smoking, chronic dermatitis and human papilloma virus (HPV) infection (4, 5). Most of them have microinvasive vulvar cancer with vulvar intraepithelial neoplasia (VIN). The most common type of cancer is squamous cell carcinoma, which emerges on labia majora in over 60% of cases (6).

The correlation between cancer and autoimmune diseases has not been completely elucidated (7). Increased relative risk of carcinoma among patients with systemic lupus erythematosus, rheumatoid arthritis and systemic sclerosis, with prominent risk for lymphoproliferative malignant diseases has been recorded (8-12). Multiple sclerosis (MS) is an autoimmune disease primarily of the central nervous system and there is no data on increased risk of cancer in MS patients. It most commonly affects women at the ages 20 to 40 (2). Furthermore, the possibility of constant stimulation of the immune system which inhibits carcinogenesis and thus decreases the incidence of cancer among the patients with MS was suggested (13). On the other hand, effects of MS treatment on cancer incidence seems to be less straightforward (14).

CASE REPORT

A 35-year-old patient with no family history and 15 years of treatment for multiple sclerosis, underwent work up for pain in the vulvar area and no other symptoms. Unphysical examination an exulcerated tumor formation (about 3 cm in diameter) in the posterior area of the right labia majora was recorded. The formation was hard but not fixed to the surrounding structures. A biopsy was performed and squamous cell carcinoma, grade II was confirmed. Reviewing patient's history, we founded that patient was also diagnosed with multiple sclerosis at the age of 20. The first manifestation of the disease was pain in the right eye and optical neuritis was diagnosed. She had ten relapses so far which were manifested as the paralysis of the right side of her body, dizziness and as optic neuritis on both eyes. Initially, the re-

lapses occurred twice a year and then later once a year. Since four years ago, there have been no major signs of deterioration except for a temporary case of dysphagia. In the initial stages of the disease, the patient received 15 doses of immunoglobulin in monthly doses of 5 g. Six years ago, the patient started her interferon treatment which she took for two years. For the past four years, she had been taking laquinimod, immunomodulator in the dosage of 0,5 mg. She stopped taking laquinimod before the surgery. She has been regularly consulted by her neurologist.

Radical vulvectomy with right-sided inguino-femoral lymphadenectomy was indicated. Operation and the post-operative period were uneventful. The patient was discharged on her 10th postoperative day. Taking the size of the tumor into consideration, the distance of resection edges from the tumor and considering the fact that no tumor infiltrates were found in the removed lymph nodes, no adjuvant radiotherapy was indicated. After two years of follow up, there is no evidence of the disease in our patient. During the follow-up period patient continued taking a laquinimod.

DISCUSSION

Vulvar cancer is rare at young age and multiple sclerosis as a comorbidity should decrease the risk of having a carcinoma. However, treatment for multiple sclerosis might be increasing the very risk.

Our patient was diagnosed with vulvar cancer at the age of 35, which is under the expected age for this type of cancer. However there is a decreasing median age of diagnosis over the past few decades (13). Moreover, vulvar cancer among young women was most commonly related to existing VIN and/or smoking as a risk factor (4, 5). These risk factors were not present in our patient. As for the symptoms, the patient did not experience itching, the most common one, but only pain in the region. Pain, discharge and bleeding are less common symptoms (7). This might be associated with MS.

Protective effect of constant activity of the immune system in autoimmune diseases and correlation between therapy for multiple sclerosis

and incidence of cancer was researched (13, 14, 15). Israeli study, compared the cancer incidence among the population with multiple sclerosis and general standardized population in the period from 1960 to 2003, showing that the incidence of cancer among women with multiple sclerosis was lower. The treatment scheme was also analysed. The patients were treated with glatiramer acetate, β -interferons and intravenous immunoglobulin. Patients treated with glatiramer acetate had a higher incidence of breast cancer development, while those that received β -interferons had a higher incidence of development of other cancer sites, but not statistically significant (15). Our patient took corticosteroids in acute attacks in the initial stages of the disease, and she later used β -interferons and finally laquinimod. Laquinimod has been turned down two times by the European Medicines Agency's Committee for Medicinal Products for Human Use because of concerns about possible teratogenic effects and cancer in animal studies of long-term exposure to laquinimod (16). The latest research, however, showed that there was no increase in the incidence of malignancies in long term use of laquinimod (16, 17). Our patient was taking laquinimod for four years prior to surgery.

Surgery is the mainstay of the treatment for vulvar cancer. Therefore, radical vulvectomy with right-sided inguinofemoral lymphadenectomy was performed. Omission of lymphadenectomy is allowed only when tumor stromal invasion is ≤ 1 mm. An unilateral lymphadenectomy is performed only in well-lateralized early lesions, which was the case with our patient (18). Pathologic status of the inguinal nodes and affection of adjacent structures are most important factors determining survival and prognosis while the size of the primary tumor is not so important (19). In operable patients with disease negative lymph nodes, the overall survival (OS) rate is 90%, compared with patients with positive lymph nodes, the 5-year OS rate is about 50% to 60% (20).

CONCLUSION

Patient with multiple sclerosis may require additional attention due to effect of their therapy and lack of symptoms when malignant gynecological tumors are considered. Timely surgery provides good disease control.

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