Laparoscopic management of primary vaginal clear cell carcinoma in a woman without diethylstilbestrol exposure

Aykanat Y, Api M.

Department of Gynecology and Obstetrics, Medipol University, Istanbul.

Introduction: Primary vaginal clear cell carcinomas (PVCCA) are rare female genital tract malignancies, which constitute 5-10% of vaginal cancers. There is a linkage between the vaginal clear cell carcinoma and intrauterine diethylstilbestrol (DES) exposure. Since the incidence of PVCCA is rare the clinical behavior, pathology, genetic characteristics and the prognosis of the disease has not been clearly elucidated. Although bimodal age distribution, mean age 22 years in women with exposure to DES and 55 years in postmenopausal women with no history of DES, but who may have pelvic endometriosis, here we present a young women at the age of 29 without in utero DES exposure or endometriosis.

Patient: A 29 years old woman (gravida 1, para 1), presented with intermittent postcoital vaginal bleeding for 6 months. She had a strong family history of endometrial cancer. Pelvic examination showed suspicious ulcerative lesion located in the posterior vaginal fornix. Histopathologic evaluation of vaginal biopsy revealed clear cell carcinoma. Patient had no records of prenatal DES exposure and urogenital abnormality. Magnetic resonance imaging (MRI) and positron emission tomography–CT revealed a 18 mm right iliac lymphadenopathy and 13 mm lesion in the posterior vaginal fornix without para-vaginal invasion. Based on the preoperative diagnosis of clinical stage III PVCCA (International Federation of Gynecology and Obstetrics) patient underwent laparoscopic radical hysterectomy with bilateral salpingectomy accompanied by vaginectomy, pelvic lymph node dissection and ovarian transposition. The definitive pathology confirmed PVCCA and vaginal adenosis with positive pelvic lymph node at right iliac level and classified as stage III. Patient received adjuvant chemoradiotherapy.

Results: During 18 months follow-up, there was no local recurrence or metastasis. Though, the patient presents with vaginal stricture due to the adjuvant radiotherapy. After the operation vaginal length was shortened to 3 cm and after the adjuvant radiation brachytherapy, there was almost no vaginal space left over. Nevertheless, no significant decrease was detected in female sexual score index and neither patient nor her husband was complaining about quality of their sexual life.

Conclusion: Since PVCCA is rare, there is no consensus on the treatment modality. The treatment methods should be selected according to the stage of the cancer, surgeon's experience and patient's clinical status. We performed laparoscopic surgery for the resection of PVCCA. The management with minimally invasive surgery provides a shorter recovery period and commencing of subsequent chemo/radiotherapy if necessary.

Figure 1: Fat saturated contrast enhanced (FS-CE) T1-weighted sagittal (A) and T2-weighted axial images revealed the presence of a tumor mass protruding into vagina. Diffusion weighted (C) image shows increased vaginal wall thickness and apparent diffusion coefficient (ADC) map (D) demonstrated low ADC values.

Figure 2: Macroscopic examination of the resected vaginal wall.