TURKISH JOURNAL of ONCOLOGY

Turk J Oncol 2024;39(4):431–433
doi: 10.5505/tjo.2023.3848

LETTER TO THE EDITOR

A Dramatic Response for Cervical Cancer with Uterine Proplasus Using Palliative Radiotherapy

Zeliha GÜZELÖZ,[1] Kamuran ACAR,[2] Umut GÖK BALCI,[3] Mihriban ERDOĞAN[1]

[1]Department of Radiation Oncology, University of Health Sciences Tepecik Training and Research Hospital, İzmir-*Türkiye*
[2]Department of Pathology, University of Health Sciences, Tepecik Training and Research Hospital, İzmir-*Türkiye*
[3]Department of Palliative Oncology, University of Health Sciences, Tepecik Training and Research Hospital, İzmir-*Türkiye*

Dear Editor,

Uterine prolapse (UP) is a common condition in older women and is seen in 40–60% of women who give birth.[1] Although it is so common, the combination of cervical cancer and UP is a rare event. Some researchers advocate that prolapse protects against cervical cancer, while others argue that the cervix is more irritated when it is outside, and therefore, the risk of neoplastic cell formation increases.[2–4]

There is no clear incidence reported in the literature, but UP and cervical cancer coexist in 0.14% of reported cases.[5,6] There is no standard treatment approach. Most of the cases are treated with multimodality treatment techniques such as surgery, external beam radiotherapy, brachytherapy, and concurrent chemotherapy.[7] Our case involves one of these patients who was treated with only palliative external beam radiotherapy because of her age and condition but had a dramatic response.

An 89-year-old, gravida seven, parity four, with vaginal delivery and hypertension, presented with vaginal bleeding and uterine prolapse. She had been suffering from UP for 10 years. A vegetative 10×10 cm ulcerated, bleeding tumoral lesion filled the anterior surface of the irreducible prolapsed uterus (Fig. 1). Cervical biopsy revealed micro-invasive squamous cell carcinoma of the cervix, p63 positive, pan-cytokeratin positive, Ki-67 focal positive. In thoracic and abdominal computed tomography, nonspecific solitary nodules, a 24 mm hypodense lesion in the liver (metastasis?), voluminous uterus, lymphadenopathies 14×12 mm in the right obturator lymphatic area, and 16×10 mm in the left obturator lymphatic area were found. She was staged as FIGO stage IV. Because of her age and poor performance, chemotherapy was not recommended. Palliative radiotherapy was recommended by our tumor board. External beam radiotherapy was administered in 12 fractions of 2.5 Gy via Volumetric Arc Therapy. The whole prolapsed uterus and visible lymphadenopathies were included as Gross Tumor

Fig. 1. Before radiotherapy.

Received: November 07, 2022
Revised: November 19, 2022
Accepted: July 02, 2023
Online: September 25, 2024

Accessible online at:
www.onkder.org

Dr. Zeliha GÜZELÖZ
Sağlık Bilimleri Üniversitesi,
Tepecik Eğitim ve Araştırma Hastanesi,
Radyasyon Onkolojisi Kliniği,
İzmir-Türkiye
E-mail: zelihaguzeloz@gmail.com

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Fig. 2. One-month follow up.

Fig. 3. Three months follow up.

Volume. An additional margin of 1.5 cm was added as Planning Target Volume. At the end of the 12 fractions, an adapted plan was made via a new planning computed tomography. An additional boost dose of 7.5 Gy in 3 fractions was administered to the whole uterus. A total of 37.5 Gy was given. The therapy was well tolerated, and there was no grade 3–4 toxicity. One week after starting the therapy, the bleeding stopped completely. She experienced no severe toxicity. During the one-month follow-up, regression in the mass was discovered (Fig. 2). At the 3rd month follow-up, the entire uterus had reduced, and a complete clinical response was observed (Fig. 3). The patient was invited to the clinic for further radiological response evaluation. However, because she lived in a remote village, she did not attend. She did not accept any adjuvant therapy. At her 36-month check-up, she was still alive and had no complaints other than urinary incontinence.

The best treatment for the coexistence of UP and cervical cancer is unclear. Treatment options include surgery or radiotherapy-based approaches.[7] In general, radiotherapy dose schedule details have not been provided in the literature. In detailed cases, most of the radiotherapy regimens have curative dose prescriptions. Doses of 45–52.2 Gy have been reported.[8–10] Additionally, brachytherapy was added in two cases.[9,10] Even though combined therapies are more successful, they can be quite risky in elderly patients. In the present case, a palliative dose was prescribed due to the patient's condition. However, after a good response in two weeks and because the patient tolerated the therapy well, a booster dose of 7.5 Gy was added. Thus, the total biologically equivalent dose (EQD2) in 2 Gy fractions reached 39 Gy with $\alpha/\beta = 10$ Gy for the cervical tumor using the linear quadratic model.[11]

Although a palliative dose was administered, the response was excellent. All the symptoms were palliated. Without the need for surgery, uterine prolapse regressed completely. Palliative radiotherapy appears to be a good option to provide symptom palliation in older patients who cannot tolerate more aggressive curative treatment. We should offer our patients any opportunity for treatment that can improve their quality of life, especially for elderly patients.

We all declare that informed consent was obtained from the patient and her relatives and that her clinical information and photographs would be used for scientific purposes without sharing their identity information.

All authors disclose that no conflict of interest that has influenced either the conduct or the presentation of the manuscribe.

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