

A case report of cervical cancer stage Ib2 treated with radical trachelectomy

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Abstract

We present the case of a 34-year-old woman, with cervical cancer Stage IB2, treated with radical trachelectomy (and bilateral lymphadenectomy) instead of radical hysterectomy. Recurrence of the disease was diagnosed just a few months after the initial operation. Although the woman's desire was the preservation of fertility, it should be emphasized that best cancer treatment according to stage, is necessary to not endanger the patients' life.

Keywords: Cervical Cancer; Recurrence; Fertility preservation; Radical surgical treatment

1. Introduction

Cervical cancer is the 4th leading cause of cancer death, with >340,000 global deaths in 2020 (Sung et al 2021). However, cervical cancer is included in the cancers that have high cure probabilities when treated according to best practices (World Health Organization 2022). On the other hand, treatment received is significantly associated with cervical cancer recurrence and recurrent patients have almost three times the risk of death compared with those without recurrence (Li et al 2022). The purpose of this study is to present a woman with cervical cancer wishing fertility preservation and comment on the possible consequences of a treatment not sufficiently radical.

2. Case presentation

We present a 34-year-old woman, with cervical cancer, treated with radical trachelectomy and bilateral lymphadenectomy. Pathology examination revealed invasive squamous carcinoma of low differentiation, HPV related. The mean diameter of the tumor was 3.8 cm. No LymphoVascular Space Invasion (LVSI) was revealed. Surgical margins of the vagina and parametrium were negative. Oncology council (OC) staged the patient as Stage IB2 and recommended clinical follow-up. However, a few months after the initial operation, a Positron Emission Tomography Scan (PETS) revealed a pelvic recurrence. The patient was re-operated for the removal of related lesions and the OC recommended chemotherapy as an "initial" step in this stage of the disease. It must be further underlined that, after the recurrence, the second operation did not follow the "initial" guidelines about the extent of the operation for a stage IB2 cervical cancer, removing only the macroscopically seen recurrences.

3. Discussion

It should be emphasized that, according to related guidelines, in patients with Stage IB2 cervical cancer, appropriate treatment is radical hysterectomy (Cibula et al 2018). Radical trachelectomy could be proposed in women wishing a

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fertility sparing surgery for earlier stages of cervical cancer. According to NCCN guidelines (2023), radical trachelectomy could be discussed in select IB2 cases. However, convincing related references for stage IB2 cases are not included in NCCN guidelines. In particular, in a relative chart, it is written “Select IB2^f → Radical trachelectomy + pelvic lymphadenectomy”. However, in ^f, it is written “Fertility-sparing surgery for stage IB has been most validated for tumors ≤2 cm”. Convincing results for tumors >2 cm are not included and/or commented. The next sentence “For stage IB2 lesions 2–4 cm, abdominal approach is favored” is not relevant to validation of radical trachelectomy per se. Furthermore, it is written that “the abdominal radical trachelectomy is a reasonable fertility-sparing strategy”. However, in the next sentence, there are no data of recurrences or other convincing prove of this method but a comparison with the vaginal approach. Similarly, the sentence “(abdominal radical trachelectomy) is suitable for select stage IB1–IB2 cases, and has been utilized in lesions between 2–4 cm in diameter” has only one RETROSPECTIVE study as reference with less than 30 patients (Wethington et al 2013) and its conclusion is not included in guidelines after 2013. Thus, in a complete informed consent procedure, it should be emphasized that fertility-sparing surgery for stage IB has been most validated for tumors ≤2 cm and not for tumors 2-4 cm. Furthermore, NCCN guidelines point out that radical hysterectomy with bilateral pelvic lymphadenectomy is the PREFERRED treatment for FIGO stage IB2 (when fertility preservation is not desired). Even for patients with Stage IA2 cervical cancer (stromal invasion ≤5 mm in depth), the standard treatment is a modified radical hysterectomy including removal of the uterus, cervix, upper one-fourth of the vagina, and parametria with pelvic lymphadenectomy (Straughn & Yashar 2023). Trachelectomy which was selected for this patient, can be safely proposed for patients with early-stage disease at low risk of cancer recurrence, as those with lesions ≤2 cm. Furthermore, for patients with stage IB2 and even for stage IB1, radical hysterectomy seems safer including the removal of up to the upper one-half of the vagina. It must also be emphasized that, although in cervical cancer, most recurrences occur during the first 2-3 years, after a proper operation, the risk of recurrence for Stage IB2 is only 14% at a follow-up of 12 years! (Suprasert et al 2012). On the contrary, the recurrence of the above patient was diagnosed just a few months of the initial operation. Such a course, it can be said that it was “expected” taking into account the limited extend of the initial operation and the area of recurrence.

4. Conclusion

In order to choose the most appropriate treatment, the parameters that are currently considered important such as the age of the patient, the patient's general health and medical history, her desire to have children, the stage of the disease and the differentiation of the tumor .

Surgical treatment is a cornerstone of cervical cancer treatment. The indicated treatment for the initial stages of the disease is surgical treatment, specifically Radical Hysterectomy with lymph node removal.

In the event that the tumor in the cervix and the adjacent tissue is not removed correctly, the recurrence rates of the disease increase steeply, resulting in a decrease in the patient's survival. Until now, this operation was mainly performed by laparotomy (a vertical incision in the abdominal wall), while in recent years in a few advanced centers it is performed laparoscopically, which now offers a better quality of life to patients with cervical cancer, maximizing the safety and effectiveness of the operation . It is internationally considered the best treatment for patients with early stage cervical cancer.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

All participants provided written informed consent gave their written consent for their participation in the present study.

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