

## PROGNOSTIC FACTORS OF CERVICAL CANCER IN PREGNANT WOMEN

**Tugizova Dildora Ismoilovna**

**Amonova Madina Furkatovna**

**Farmonova Dilora**

Samarkand State Medical University

<https://doi.org/10.5281/zenodo.7258249>

**Abstract.** *Currently, cervical cancer (CC) in most countries of the world continues to be the most common malignant tumor among the female population. Every year over 500,000 primary cases of cervical cancer are registered worldwide, and about 270,000 women die from this disease.*

**Keywords:** *cervical cancer, women, female population, world.*

## ПРОГНОСТИЧЕСКИЕ ФАКТОРЫ РАКА ШЕЙКИ МАТКИ У БЕРЕМЕННЫХ

**Аннотация.** *В настоящее время рак шейки матки (РШМ) в большинстве стран мира продолжает оставаться самой распространенной злокачественной опухолью среди женского населения. Ежегодно в мире регистрируется более 500 000 первичных случаев рака шейки матки, от этого заболевания умирают около 270 000 женщин.*

**Ключевые слова:** *рак шейки матки, женщины, женское население, мир.*

## INTRODUCTION

High mortality from cervical cancer is associated with late diagnosis and a high proportion (more than 48%) of patients with poor prognosis - stage II - IV. CC in the aggregate accounts for 15.8% and ranks second among all malignant neoplasms in women [3,10]. The five-year survival rate for stage I CC is 88.8%, and for stage IV 7.8% [11]. One third of all cervical carcinomas are diagnosed in women of reproductive age [15,16]. About 3% of cervical cancer cases are diagnosed during pregnancy [14], which puts a woman and her family in front of a difficult choice between giving birth to a new life and terminating the pregnancy. These cases correspond to half of the cancers diagnosed during the gestational period. The estimated incidence of cervical cancer is 1 in 1000–5000 pregnancies [18–19]. According to several foreign studies, in 76% of cases, cervical cancer during pregnancy is diagnosed only at stage 1B [17-20].

Cervical cancer detected within 6 months after termination of pregnancy and 12 months after delivery is classified as a pregnancy-associated tumor because clinical and morphological manifestations of the tumor process are already present during pregnancy. Among patients with cervical cancer, the frequency of combination with pregnancy is 1-3%. The average age of patients with cervical cancer in combination with pregnancy is 30 years [7,8,9]. Currently, cases of registration of the disease in primiparas and cases of detection of invasive cervical cancer during a desired pregnancy, when patients insist on preserving the fetus, despite the risk of disease progression, have become more frequent [13]. The data of modern literature indicates that cervical cancer in pregnant women in 47-50% of cases is diagnosed in stage III-IV. The reasons for the neglect of cervical cancer during pregnancy are the lack of the necessary cytological examination during the dispensary registration of a woman, in the presence of bloody discharge from the genital tract, the cervix is not examined, smears are not taken for cytological examination in the presence of an eroded surface of the cervix, fear during a biopsy of an eroded

vaginal parts of the cervix during pregnancy, this is argued by the fact that bleeding, miscarriage, etc. can be caused. [12]. We know that human papillomavirus (HPV) infection increases the risk of developing cervical dysplastic processes by 10 times. In pregnant women, HPV is detected in the laboratory 10 times more often than in non-pregnant women.

Long-term results in cervical cancer during pregnancy and in non-pregnant patients are approximately the same if they are comparable in age, stage and time of diagnosis. The prognosis for early forms of cervical cancer in non-pregnant women and during pregnancy is similar. It is important to understand that the prognosis for the fetus is more favorable when a tumor is detected in the third trimester, and for the mother - in 1[2,4]. The main factor determining the prognosis remains the stage of the disease. The five-year survival rate for stage I CC is 88.8%, and for stage IV it is only 7.8% [10].

According to literature data, in foreign countries, a full-fledged screening of pregnant women has been developed when they are registered, even in remote regions from the center. This is confirmed by the fact that the detection rate of non-invasive cervical cancer among pregnant women in this region is much higher. The mentality of our region is much different from the mentality of foreign countries. For women in our region, a characteristic feature (custom) is; early marriage with an early birth of the first child, having many children, not timely contacting a gynecologist to register for pregnancy. This is especially true for multiparous pregnant women. Screening research among pregnant women is not always carried out. Many national women, when detecting malignant tumors, put the completion of a normal pregnancy in the foreground, and put their health in the last place. If a malignant tumor is suspected during pregnancy, they often refuse special diagnostic methods, such as colposcopy, they refuse to take a biopsy because of the fear of miscarriage. Postpones diagnosis and treatment until the baby is born. The impossibility of some informative diagnostic procedures in case of a suspected malignant tumor complicates the diagnosis of cervical cancer in pregnant women. If neoplasia of the cervical canal with a uterine variant of cervical cancer is suspected, curettage of the cervical canal is not performed due to the high risk of miscarriage after this manipulation. In the cervical variant, a biopsy is taken to verify the diagnosis by atypical conization of the cervix with a cone height of no more than 1.5 cm. Conization of the cervix after the 14th week of pregnancy is associated with a high risk of complications [6]. To determine the staging of cervical cancer, a more necessary method of radiation diagnostics is computed tomography and radiography of the pelvic and abdominal organs. Due to the adverse effect on the fetus, this method is often avoided during pregnancy, despite their high information content. According to some authors, the use of magnetic resonance imaging to assess the size of the tumor and its germination in neighboring organs (parametrium, vagina, bladder and rectum) and the detection of metastases in the lymph nodes during pregnancy is not recommended during the first trimester of pregnancy due to harmful effects for the fetus [1]. The prognosis of the disease is determined by the size of the tumor and involvement in the pathological process of the lymph nodes. If pelvic lymph nodes are suspected, laparoscopic pelvic lymphadenectomy (PLAE) is indicated. Carrying out this method, according to some foreign authors, is safe and informative in the first half of pregnancy (up to 22 weeks). After 22 weeks of gestation, the use of laparoscopic PLAE is avoided due to formidable complications. The presence of metastatic lesions in the lymph nodes is also an unfavorable prognostic factor. Due to fear of refusal to use chemotherapy during pregnancy, although some chemotherapy drugs do not adversely affect the course of pregnancy. But until now, in most

remote rural areas of our region, there are some customs for pregnant women, such as the observance of the “chilla” rule, in which a woman after childbirth does not leave the house for at least 40 days and thereby starts the course of the disease up to the progression of the tumor process. All this leads to a worse prognosis of the disease.

**Purpose of the study.** The aim of the study is to study the prognostic factors of cervical cancer in combination with pregnancy to optimize diagnosis and treatment.

## **MATERIALS AND METHODS OF RESEARCH**

To study the prognostic factors of cervical cancer associated with pregnancy, we studied the case histories and outpatient records of 18 pregnant women with cervical cancer who received treatment at the SFRNSPMTSOiR from 2012-2016. The average age of pregnant women was 28 years. Among pregnant women, 5 are primiparous, 13 are multiparous. In six women, cervical cancer was diagnosed 2-3 months after birth. When studying the anamnestic data among multiparous women in five, a year before the onset of pregnancy, cervical erosion was revealed, which was prevented by DEC and cryodestruction. The diagnosis of cervical cancer was established after 2-3 months after childbirth. In all women, the diagnosis of cervical cancer was confirmed by histological examination. When determining the stage of the disease, all patients had stage II-III of the process. The advanced form was mainly observed among patients in whom cervical cancer was diagnosed after 2-3 months after childbirth. A parametric variant of tumor growth was found in 12 women, and a vaginal variant in 6 women. Morphologically, in most cases it turned out to be squamous cell carcinoma without keratinization, and in 5 cases, glandular cancer. According to the form of tumor growth, endophytic growth in 12 women, exophytic form in six. All women received chemoradiation therapy according to the standard. Due to the neglect of the stage and the progression of the tumor during the treatment period, surgical treatment was not performed.

## **RESULTS**

Treatment outcomes were assessed by five-year survival. In 6 women in whom cervical cancer was diagnosed 2-3 months after birth, it was decided to carry out chemo-radiation therapy according to the standard program. The remaining 12 pregnant women were with a gestational age after 22 weeks, who decided to delay treatment until the end of pregnancy by 10-13 weeks. Delivery was by caesarean section. After 4 weeks after delivery, the patients were prescribed from 4 to 6 courses of polychemotherapy according to the PF scheme (ftoruracil 1.0 g. № 4, 1-4 days, Kemocarb 450 mg. № 1, 1 day) or according to the TR scheme ( Paclitaxel 260 mg № 1, 1 day for 3 hours, Kemocarb 450 mg № 1, 1 day). During the course of chemotherapy, after the 4th course, three patients with uterine-parametric variant of tumor growth developed unilateral and, after a few time, bilateral hydronephrosis of varying degrees. All three patients underwent nephrostomy for hydronephrosis. Two patients underwent ligation of the internal iliac arteries due to heavy bleeding. Despite the treatment, progression of tumor growth was observed in all patients, and in three patients it was complicated by rectovaginal and cystovaginal fistula in the second year. Of the 18 patients, only three received combined radiation therapy after three courses of PCT. In all cases, the outcome ended with an unfavorable prognosis; out of 18 patients, only five survived to 3.5 years.

## **CONCLUSIONS**

1. Cervical cancer detected during pregnancy is one of the urgent problems.

2. Basically, cervical cancer during pregnancy is detected in young women with unrealized reproductive potential.
3. The unfavorable prognosis factor for cervical cancer in combination with pregnancy includes: the stages of the process, the gestation period is more than 22 weeks, the decrease in differentiation and vascular invasion of the tumor, the young age of the patient, some national customs, bilateral parametrium damage, the uterine variant of the spread and the volume of the primary tumor over 50 cm<sup>3</sup>, the presence of metastases in the pelvic and / or para-aortic lymph nodes.
4. In the later stages of the disease, pregnancy can have a negative impact on the prognosis due to delayed treatment.

## REFERENCES

1. Alieva J.O. Kim V.A. Kyzaeva A.D. Diagnosis and treatment of cervical cancer during pregnancy. Bulletin of KazNMI №2-2018 p1-3
2. Akhmetzyanova A.V., Nigmatulina N.A. Oncoproteins E7 and p16ink4 $\alpha$  in the diagnosis of cervical intraepithelial neoplasia / Proceedings of Vseros. congress with international participation "Outpatient practice - in the epicenter of women's health" - M., 2012. -S.154-155.
3. Bestaeva N.V., Nazarova N.M., Prilepskaya V.N. etc. //Obstetrics and gynecology. - 2013. - No. 7. – P.45–50.
4. Shirinliev N.M., Andrieva N.L. Malignant neoplasms of the cervix associated with pregnancy. Medical News No. 12-2016 p16-22.
5. Shirinliev N.M., Andrieva N.L. Clinical examination and management of pregnant women with cervical cancer. Medical News No. 6-2018 p. 65-68.
6. Poyanidi Yu.G., Borovkova E.I., Dobrokhotova Yu.I., Arutyunyan A.M. Tactics of management of pregnant women with invasive cervical cancer BC. Mother and child.V.2. No. 2 2019 P.135-138.
7. Urmancheeva A.F. Cervical intraepithelial neoplasia and pregnancy / A.F. Urmancheeva, E.A. Ulrich // Journal of Obstetrics and Women's Diseases. - 2006. - No. 4. - P.8-10.
8. Urmancheeva A.F. Cervical cancer and pregnancy // Practical oncology. - 2002. - Vol. 3. - No. 3. - P.183 - 193.
9. Urmancheeva A.F. Tumors of the female genital organs and pregnancy. Manual for doctors / A.F. Urmancheeva, E.A. Ulrich - St. Petersburg: Publishing house N-L, 2011. -40 p.
10. Yagudina L.A. // Practical medicine. - 2014. - No. 3 (79). – P.46–49.
11. De Kok I.M., van Rosmalen J., Dillner J., et al. // Br. Med. J. - 2012. - Vol.344. – P.670.
12. Gedefaw A., Astatkie A., Tessema G.A. //PLOS One. - 2013. - Vol.8 (12): e84519.
13. Ikenberg H., Bergeron C., Schmidt D., et al. // J. Natl. cancer. Inst. - 2013. - Vol.105, N20. – P.1550–1557.
14. Bernard W, STEWART, Christopher P WILD. World Cancer Report 2014: International Agency for Research on Cancer. World Health Organization
15. Jacobs IA, Chang CK, Salti GI. Coexistence of pregnancy and cancer // Am Surg. - 2004. - No. 70 (11). - R. 1025-1029.

16. Simcock B, Shafi M. Invasive cancer of the cervix. *Obstetrics // Gynaecology and Reproductive Medicine*. - 2007. - No. 17 (6). - R. 181-187.
17. Available from: [http://www.obstetrics-gynaecology-journal.com/article/S1751-7214\(07\)00080-2/abstract](http://www.obstetrics-gynaecology-journal.com/article/S1751-7214(07)00080-2/abstract). Accessed in 2009 (Nov 25).
18. Pavlidis NA. Coexistence of pregnancy and malignancy // *Oncologist*. - 2002. - No. 7 (4). - R. 279-287.
19. Traen K, Svane D, Kryger-Baggesen N, Bertelsen K, Mogensen O. Stage Ib cervical cancer during pregnancy: planned delay in treatment-case report // *Eur J GynaecolOncol*. - 2006. - No. 27 (6). - R. 615-617.
20. Nguyen C, Montz FJ, Bristow RE. Management of stage I cervical cancer in pregnancy // *ObstetGynecolSurv*. - 2000. - No. 55 (10). - R. 633-643.
21. American College of Obstetricians and Gynecologists. ACOG practice bulletin. Diagnosis and treatment of cervical carcinomas. Number35, May 2002. American College of Obstetricians and Gynecologists // *Int J Gynaecol Obstet*. - 2002. - No. 78 (1). - R. 79-91.
22. Зокирова Н. и др. Оптимизация ведение женщин с пузырьным заносом // *Журнал вестник врача*. – 2014. – Т. 1. – №. 01. – С. 89-93.
23. Каримова М., Асатулаев, А., & Тугизова, Д. (2022). Оценка эффективности различных методов лечения больных с местнораспространенным раком молочной железы. *Журнал вестник врача*, 1(04), 69–70. извлечено от [https://inlibrary.uz/index.php/doctors\\_herald](https://inlibrary.uz/index.php/doctors_herald)
24. Тугизова Д. И., Джураев М. Д., Каримова М. Н. ФАКТОРЫ ПРОГНОЗА ПРИ РАКЕ ШЕЙКИ МАТКИ, АССОЦИИРОВАННЫЕ С БЕРЕМЕННОСТЬЮ.
25. Тугизова Д. И., Каримова М. Н., Рахимов Н. М. ТАКТИКА ВЕДЕНИЯ БЕРЕМЕННЫХ С ИНВАЗИВНЫМ РАКОМ ШЕЙКИ МАТКИ (ЛИТЕРАТУРНЫЙ ОБЗОР) // *ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ*. – 2022. – Т. 7. – №. 3.