

DOI: 10.34921/amj.2023.4.011

**UŞAQLIQ BORULARININ BİRİNCİLİ XƏRÇƏNGİ:
DİAQNOSTİKASI VƏ MÜALİCƏSİNİN NƏTİCƏLƏRİ****D.Q.Sumsov^{1,2}, Q.O. Sumsov², N.İ.Hiryavenko², S.A.Smiyan²,
N.V.Kalaşnik², K.O.Sikora², N.M.Rojkovskaya³, İ.Z.Qladçuk³**¹Sumı Vilayəti Klinik Onkoloji Dispanseri, Sumı;²Sumı Dövlət Universiteti, Sumı;³Odessa Milli Tibb Universiteti, Odessa, Ukrayna

Xülasə. Məqalədə Sumı Vilayətinin Klinik Onkoloji Dispanserinin 1964-2021-ci illər ərzində əldə edilən materialları əsasında uşaqlıq boynunun birincili xərçəng şişi olan 253 xəstənin məlumatları retrospektiv analiz edilmiş xəstəliyin diaqnostika və müalicə üsullarının təkmilləşdirilməsinə dair məlumatlar təqdim edilmişdir. 1964-1995-ci illərdə müalicə alan xəstələr qrupunda olan 163 xəstədən 56,9%-də, 1995-2021-ci illərdə müalicə alan 90 xəstədən isə 67,2%-də sağalma qeydə alınmışdır. 1996-2021-ci illərdə platin preparatları və taksanla müasir protokollar əsasında adyuvant polikimyəvi terapiya alan xəstələrdən 84,2±5,9%-də, o cümlədən xəstəliyin I mərhələsi olan xəstələrdən 92,9±6,9%-də 5-illik yaşama qeydə alınmışdır.

Müəlliflərin fikrincə, xəstəliyin klinik əlamətləri müasir əlavə diaqnostika metodlarından adekvat şəkildə istifadə və dərman müalicəsinin tətbiqi uşaqlıq boruları xərçənginin aşkara çıxarılmasını və müalicənin effektivliyinin artırılmasını təmin edə bilər.

Açar sözlər: uşaqlıq borularının birincili xərçəngi, diaqnostikasi, müalicəsi, proqnozu

Keywords: primary fallopian tubes cancer, diagnosis, treatment, prognosis

Ключевые слова: первичный рак маточных труб, диагностика, лечение, прогноз

**PRIMARY FALLOPIAN TUBE CANCER:
DIAGNOSIS AND TREATMENT RESULTS****D.G.Sumtsov^{1,2}, G.O.Sumtsov², N.I.Hyriavenko², S.A.Smiian²,
N.V.Kalashnyk², K.O.Sikora², N.M.Rozhkovska³, I.Z.Gladchuk³**¹Sumy Regional Clinical Oncological Dispensary, Sumy, Ukraine²Sumy State University, Sumy, Ukraine³Odesa National Medical University, Odesa, Ukraine

A retrospective analysis was conducted on the material of the Sumy Regional Clinical Oncology Dispensary, involving 253 patients with primary fallopian tube cancer. The progression of diagnostic and treatment outcomes for primary fallopian tube cancer was presented over the period from 1964 to 2021. In the group of 163 patients from 1964 to 1995, the five-year survival rate was 56.9%, while among the 90 patients from 1995 to 2021, it increased to 67.2%. In 1996-2021, among patients who underwent adjuvant polychemotherapy according to modern protocols with platinum and taxane drugs, the five-year survival rate reached 84.2±5.9% (32/38) with a confidence interval of 69-94, including patients with stage I – 92.9±6.9% (13/14) with a confidence interval of 66-100.

Detailed assessment of clinical and morphological manifestations, and adequate use of modern complementary diagnostic methods and drugs can improve the recognition and treatment of primary fallopian tube cancer.

Introduction

Primary fallopian tube cancer (PFTC) is a disease that is rare, difficult to diagnose, and has a poor prognosis. After the first reliable

description of this tumor (K. Ortman, 1866), more than one and a half hundred years have passed, but the diagnosis and treatment of this tumor remain far from solved problems.

According to literature data and personal observations, PFTC incidence is 0.062 per 100,000 women per year, or 1.3–1.9% of gynecological cancer and at least 4–6% of cancer of uterine appendages [1,2]. Ongoing epidemiological studies note an increase in the incidence of PFTC. According to American authors, in North America, this rate increased from 0.22 per 1 million women in 1999-2001 to 0.62 per 1 million women in 2011-2012, and according to other authors, from 2001 to 2014, the incidence of PFTC increased up to 4 times [3, 4]. Even in specialized cancer hospitals, reliable preoperative diagnoses in PFTC do not exceed 10-15% [5], and errors during laparotomies and laparoscopies reach 50% [6,7].

Treatment methods for such patients remain insufficiently studied. Even in recent decades, the published survival results cannot be satisfied [8,9]. The study of the causes, diagnostic and treatment features of PFTC is becoming increasingly urgent because of increasing morbidity and the proven role of fallopian tube mucosa pathology in the occurrence of serous ovarian and peritoneal cancers [8,9].

Objectives. Based on the Sumy Regional Clinical Oncology Dispensary material, analyze and present in a historical aspect the progression of the results of diagnosis and treatment of patients with PFTC.

Materials and methods. We have analyzed the diagnostics, treatment and long-term follow-up of 253 patients with PFTC, as well as data from the cancer registry from 1964 to 2021. The patients ranged in age from 34 to 78 years (an average 56.5 years), and most patients (194-76.6%) were diagnosed with postmenopausal age. The right fallopian tube was affected in 106 (41.9%) cases, and the left - in 118 (46.6%) and 29 (11.5%) patients were affected bilaterally. All of them have been operated, and the diagnoses were confirmed histologically. For differential diagnosis and clarification of the primary localization of the lesion, we used the criteria for diagnosing PFTC proposed by C. Hu et al. (1950) and modified by A. Sedlis (1951) and M. Yoonessi (1979) [5,9,10]. If necessary, histological and cytological express diagnostics methods were used during operations [2]. Histologically, according to our studies, serous adenocarcinomas of various degrees of malignancy constituted 82.8% of the neoplasms of the

fallopian tubes, most of them (90.8%) being of moderate and low differentiation, which characterizes PFTC as a very aggressive tumor. Endometrioid adenocarcinomas are the second most frequent (11.4%) and about 6% are carcinosarcomas, mucosal, squamous cell, and other rare malignancies of the fallopian tubes [11]. Immunohistochemical studies were carried out in rare and challenging to interpret morphological forms of PFTC.

These results are consistent with those of other authors. Based on the medical records, the staging is adapted and consistent with the FIGO 2014 recommendations. Statistica 10.0 software (StatSoft Inc., USA) was used to evaluate the results statistically. All our observations were divided into two groups.

The first group – 163 patients were treated in 1964-1995 when radiotherapy was still used after surgeries, and the chemo preparation was mainly thiophosphamide and cyclophosphane derivatives only.

The second group – 90 patients treated in 1996-2021, when after the proven lymphotropic of the tumor, postoperative radiotherapy was abandoned in the background, the surgical phase of treatment was reconsidered, the preference for adjuvant polychemotherapy (PCT), according to FIGO, ESMO, ESGO clinical standards with a new generation of more effective chemo drugs, including platinum drugs and taxanes was begun.

Results

The first group. Of the 163 patients of the first group, 37.4% (61/163) were identified in FIGO stage I 33.1% (54/163) in II, 26.3% (43/163) in III and 3.1% (5/163) in stage IV. In these years, we widely used bicontrast radiographs and exfoliative cytology for the diagnosis of PFTC [11-12] and conducted a histological examination of the surgical material according to the protocols [13]. Preoperative conclusive diagnoses of PFTC were established in 43 (26.4%) patients, and together with presumptive ones (16), they amounted to 36.5%. The second most frequent diagnosis is ovarian cancer or suspected ovarian cancer - 41 (25.2%), and the third was ovarian cysts or hydrosalpinx 19 (11.6%). Ten (6.1%) patients were diagnosed with "acute abdomen" and underwent urgent surgery outside oncological hospitals. The diagnosis of hormone-active ova-

rian tumor was made in 3 (1.8%) patients. Initial PFTC against the background of uterine leiomyomas and ovarian cancer were found in 16 (9.8%) patients as an incidental finding [14]. In the medical records of 15 patients, there were no precise data on the preoperative diagnosis.

Treatment of patients in this group always began with cytoreductive surgery. Total hysterectomy with omental resection was performed in 120 (73.6%) PFTC patients, of which 15 had type II, according to M. Piver (1974), mostly with removal or biopsy of lower lumbar lymph nodes (LLNs). Less radical surgeries, such as subtotal hysterectomy or removal of the uterine appendages, were performed in 43 (26.4%) patients. The greater omentum was extracted in 156 (95.7%) operated patients. Macroscopically optimal cytoreduction was achieved in 102 (62.5%) operated on (R0-58.9%; R1-29.5%; R2-11.5%) [6,15].

After operations, 19 patients with PFTC underwent only telegamotherapy courses for the pelvic area in doses of 3000-3600 rads in points A and B. According to FIGO, nine women with I stage and five patients with II and III stages. This group of patients' average 5-year survival rate is $37\pm 11\%$ (19/7) confidence interval (CI) 16-62.

In 39 patients after surgery, thiophosphamide was injected into the abdominal cavity, followed by intravenous or intramuscular injections, and telegammotherapy was started only after 7-10 days. The group consisted of 18 patients with FIGO stage I, 12 with FIGO stage II, 6 with FIGO stage III, and 3 with FIGO stage IV (12/39) CI 17-48) lived 10 years or more. Only $20\pm 6\%$ (39/8) CI 10-37 patients lived up to three years. Patients with stage IV did not live even three years. In patients in whom the tumor was fixed in the Douglas pocket or due to the spread of the tumor process, subtotal hysterectomy was performed, and the adjuvant chemo-radiation therapy was supplemented with Co-therapy, as presented earlier. These were applications of cobalt-60 in the cervical canal or vaginal fornix in doses of 3500-3900 rads to point A. This treatment was given to 32 patients, of whom 13 were stage I, 7 were stage II, 11 were stage III, and one patient was stage IV. More than 5 years lived $46.9\pm 8.8\%$ (15/32) CI 29-65 patients, including more than 10 years $25.0\pm 7.7\%$ (8/32) CI 12-43.

The three years were overcome by $16\pm 7\%$ (32/5) CI 5-38 patients. One of this group of patients, 35 years old with stage IIIA1, treated with this technique, was routinely followed for 42 years and died of another disease.

Adjuvant PCT alone was given to 50 PFTC patients. Five-year survival was achieved in $52.0\pm 7.1\%$ (26/50) CI 37-66 of those treated, of whom $24.0\pm 6.0\%$ (12/50) CI 13-38 lived 10 years or more. These observations can be divided into two subgroups to compare the efficacy of different chemo medications. These are 15 patients who underwent PCT without platinum drugs (first subgroup) and 35 patients with platinum drugs (second subgroup). It appeared that in the first subgroup, the five-year recovery was $33.3\pm 12.2\%$ (5/15) CI 12-62, and in the second subgroup – $60.0\pm 8.0\%$ (21/35) CI 39-74 or 26.7% better results ($P=0.0005$ (95% CI 0,09 – 1,19).

Often after nonradical surgeries outside oncologic hospitals, patients with histologically proven PFTC were transferred to our oncologic center. To decide the extent of dissemination and advisability of repeated surgery from 1970 to 1978, we used direct lower X-ray contrast lymphography in 23 patients, and in 18 of them, we simultaneously performed endolymphatic infusion of 80 to 160 mg of thiophosphamide. One week later, if indicated, adequate surgery was performed and chemoradiotherapy was continued. Lymphographically, 7 (30.4%) patients had suspected pelvic metastases, and 5 of them also had supposed lower lumbar (para-aortic) nodes. Patients with suspected metastases underwent panhysterectomy according to the second type (M.Piver, 1974), with the removal of lumbar nodes as well. Histologically, lymph nodes metastases were confirmed in 5 of them. According to FIGO classification, there were 10 patients in stage I, 2 in II and 6 in III. One patient with stage IA died before a year from another disease. Of the 17 remaining patients in this group, $70.6\pm 11.0\%$ (12/17) CI 44-80 lived from 5 to 25 years for an average of 102 months (8.5 years). All stage I patients passed the five-year period and lived an average of 11 years. Of the 6 patients with stage III, 4 lived more than 3 years and two, even with lymph nodes metastases, lived 6 years and 9 years 10 months. These patients died of other diseases.

At the same time, during the same years (1970-1978), 59 patients with PFTC were treated in our department, 41 of them without lymph infusion. The comparison group will consist of 38 patients (16 in stage I, 12 in stage II and 10 in stage III, according to FIGO), because two patients died from other diseases during three years and one with stage IV dropped out of observation. From 38 patients, $42\pm 8\%$ (16/38) CI 26-59 lived over 5 years, including $16\pm 6\%$ (6/38) CI 6-32 - more than 10 years. A $16\pm 6\%$ (38/6) DI 6-32 patients lived up to three years. In terms of stages and age, the composition of the groups is relatively homogeneous and it is acceptable to conclude that lymph infusion improved treatment results by 29% ($P\leq 0,05$, $t = 2.03$).

Thus, different treatment methods of the first group of patients gave different results, but the conducted analysis reveals a tendency for improvement. During this period, 163 patients with PFTC were treated and monitored. We excluded 19 observations from the statistical analysis: 12 women died before age three from other diseases, and seven dropped out of follow-up. As a result, 82 ($56.9\pm 4\%$) women from 144 patients with FTC lived for five years or more, among them 46 ($32\pm 4\%$) – more than ten years. 30 ($21\pm 4\%$) patients died after three years. These data are consistent with the results of many authors [2,5,12].

The second group. The second group consisted of 90 cases of PFTC from 1996 to 2021. Of these, 35(38.9%) patients were FIGO stage I, 30(33.3%) stage II, 21(23.3%) stage III, and 4(4.4%) stage IV. Reliable preoperative diagnoses of PFTC were established in 18(20.0%) patients, and together with presumptive (15) they accounted for 36.6%. Sonography (transvaginal Doppler energy scan), CT, MRI, exfoliative cytology, and diagnostic laparoscopy were used as additional diagnostic methods [13-15]. Ovarian cancer and suspected ovarian cancer were overdiagnosed by sonography in 28 (31,1%) and ovarian cysts and hydro-hematosalpinx in 18 (20,0%). Only three (3.3%) PFTC patients had an "acute abdomen clinical symptoms and they were operated urgently outside oncological institutions. The diagnosis of hormone-active ovarian tumor was made in 2(2.2%) cases. In 8 (8.8%) cases, PFTC was an incidental finding during surgery

for leiomyomas, and uterine, and gastric cancer. All patients underwent surgery, the diagnoses were confirmed histologically.

The first step of treatment in this group of patients was cytoreductive surgery. Panhysterectomy was performed in 79 (87.8%) patients, including 15 patients with the second type, according to M. Piver (1974), mainly with removal or biopsy of lumbar lymph nodes. Subtotal hysterectomy was performed in 10 (11.1%) patients and only one patient had removal of adnexa because she had previously undergone hysterectomy for abnormal uterine bleeding. Resection of the greater omentum was performed in all cases. Macroscopically, optimal cytoreduction was achieved in 62 (68.8%) operated on (Ro-75.5%; R1-13.3%; R2-11.1%) [8,16,17]. After surgery, all PFTC patients received one to 6-8 courses of PCT. In addition, in 15 patients with tumor remnants within the pelvis, telegammatherapy was simultaneously applied in doses of 3000-3600 rads.

Seventy-two patients with PFTC were observed after surgery for more than 5 years. We will analyze the results of their treatment in detail, but we will remove 8 cases from observation. These are 4 patients who died during three years from other diseases, a patient who refused PCT and immediately dropped out of follow-up. In addition, 3 patients with initial stages of PFTC detected during operations for uterine cancer and gastric cancer in stages III, as they are observed for underlying diseases.

In summary, of the 64 treated patients, the median 5-year survival rate was $67.2\pm 5.9\%$ (43/64) CI 54-79, with $26.6\pm 5.5\%$ (17/64) CI 16-39 over 10 years. $56\pm 6\%$ (36/64) CI 43-69 patients lived more than 5 years without recurrence or metastases. $11\pm 4\%$ (64/7) DI 4-21 patients survived the three years. Five-year cure rates: stage I 83.3% (96 months), stage II 72.7% (80 months), and stage III 33.3% (36 months). Two stage IV patients died during three years period. On average, including stage IV patients, this group of treated patients lived for 65 months (5 years and 5 months).

The already analyzed 90 cases of PFTC included 58 patients in whom adjuvant PCT was carried out according to modern clinical protocols with platinum drugs and taxanes. We consider it expedient to analyze separately the treatment results of this group of patients (Table).

Table. Results of diagnosis and treatment of patients with PTC in 1996-2021 (adjuvant PCT with platinum and taxans drugs)

Stage/ Number observed	Presurgery diagnosis reliable / conjectural	Diagnosis during the surgery reliable / conjectural	Panhysterectomy/ removal of the lumbar lymph nodes	5 years without relapseabs/ %	Lived 5 years abs/%	Lived 10 years abs/%	Lived 3 years abs/%
I - 14	5/4	5/0	10/4	12/85,7	13/92,9	10/71,4	1/7,1
II- 18	7/5	3/3	12/6	11/61,1	16/88,9	5/27,7	2/11,1
III - 6	1,0	4/1	4/2	2/33,3	3/50,0	0/0	3/50,0
Total: 38	14/9	11/4	26/12	25/65,8	32/84,2	15/39,5	6/15,8

To date, 44 of them are observed after surgery for more than 5 years. As it was mentioned earlier, 6 of them were excluded from the observation. As a result, of the 38 patients in this group, 84.2±5.9% (32 /38) CI 69-94 (P ≤ 0.05) lived more than 5 years, including more than 10 years, 39.5±7.9% (15/38) CI 24-57. We observed without recurrence or metastases for up to 5 years 65.8±7.7% (25/38) CI 49-80 patients. The five-year survival rate of patients in stage I was 92.9±6.9% (13/14) CI 66-100, in II 88.9±7.4 % (16/18) CI 65-90, and in stage III 50.0±20.4% (3/6) CI 12-88.

The two groups of patients treated in different years and with other methods are practically homogeneous in stages and age. Let's compare the results of treatment of the first group of patients with PFTC in 1964-1995 – 56.9 ± 4.1% (82/144) and the second - in 1996-2021 years 84.2 ± 5.9% (32/38) who received adjuvant PCT according to modern protocols. We have a significant improvement in survival and a high significance of differences (p≤0.001, t=3.744).

According to the literature data, besides clinical stages, several other factors influence the survival rate of PFTC patients. These are size of residual tumor, presence of ascites, metastases into omentum and lymph nodes, tumor cells in the abdominal cavity, histological structure and degree of tumor differentiation, and preoperative CA-125 level [7,16,18]. In our surgical practice, we have always used the notion of complete or incomplete cytoreduction during surgery. And we do not quite understand the reports when a significant part of operated patients have tumor foci less than one cm not removed, as in any situation, they can and

should be removed.

In the second group of patients, peritoneal carcinomatosis was observed in 20.8% (15/72) cases. It was associated with ascites in 5 cases. We also included carcinomatosis cases when macroscopically, the tumor extended beyond the fallopian tube. Only two (13±9% CI 2-41) patients of this group survived 5 years or more. Out of 13 patients with metastases in the omentum, 18.1% (72/13) lived for more than five years, and only one patient (7.7%) and two patients (15.4%) lived for more than three years. Ascites in PFTC occurred in 13.9% (10/72) of patients and only three of them were not combined with carcinomatosis or omental metastases. Therefore, we consider it inappropriate to separate the effect of ascites on the survival of PFTC patients since ascites must be assumed to be the result of carcinomatosis or metastases to the omentum.

Before surgery, 50 of the second group of patients with various stages of PFTC were screened for the CA-125 oncomarker. Elevated values were noted in 23 (46.0%) of those examined. Only 8 patients had CA-125 levels between 111 and 328 IU. However, two of them survived more than 10 years. Thus, the role of assessing the level of CA-125 before surgery is unclear.

On cytological examination of ascites or abdominal washing during surgery in 93.1% (67/72) of the second group of patients with PFTC tumor cells were found in 47.8% (32/67) of those examined. Among them, 56,3±8.8% (18/32) CI 38-74 lived for over 5 years. Tumor cells were not found in 52.2±6.1% (35/67) of cases. Their five-year survival rate was 85.7±5.9% (30/35) CI 70-95, which is significantly higher than in patients with the

presence of tumor cells ($p \leq 0.01$, $t = 2.77$). These results are consistent with the data of other authors [2, 19].

Discussions

To date, the diagnosis and treatment of PFTC remains an unsolved problem. It is well known that the prognosis for any tumor, including PFTC, primarily depends on the detection time and degree of the disease. It is confirmed by the high results of patients' recovery in the initial stages of PFTC, with the help of known and available treatment methods [17,20]. Unfortunately, most publications so far only mention the difficulties of diagnosing PFTC, but often do not analyze the causes of errors or suggest ways to eliminate them. In recent years, a number of studies on the imaging of fallopian tube tumors using sonography and MRI have appeared [20,21].

The PFTC semiotics has been practically developed and the results are presented [2,22]. We have many years of experience in the problems of PFTC diagnosis. In the 1970s and 1980s, we actively used X-ray contrast diagnostic methods and exfoliative cytology. These are hysterosalpingography and bicontrast hysterosalpingography. Having examined clinical-radio-cytologically 76 patients with PTC in 44 (58±6%) CI 46-69, correct diagnoses were made before surgery, and together with presumptive ones - in 62 (82±4%) CI 71-90 [13].

Radiologic diagnostic methods are becoming a thing of the past, as they are successfully replaced by ultrasound and MRI. Ultrasound data indicate the presence of fluid not only in the fallopian tube but also in the uterine cavity [13].

Exfoliative cytology has not been sufficiently used to diagnose PFTC, even though at least 75% of PFTC patients have pathological discharge from the uterus, and it is likely to detect tumor cells. We examined 95 patients with PFTC by collecting secretions for cytological examination. Various techniques gave significantly positive results before surgery, from 11% to 65%. The least informative was the routine collection of secretions from the vagina and cervical canal, and the most effective was the collection of secretions by aspiration from the uterine cavity (pipel biopsy) [2,15].

Great expectations in the diagnosis of PFTC

are placed on laparoscopy. But, unfortunately, the results are not satisfactory yet. For example, from the available literature and operations performed by non-oncologists in our region, we selected a description of 24 cases of the use of diagnostic laparoscopy in initial forms of PFTC. After summarizing the results, it appeared that 70.8% (17/24) of patients were misdiagnosed with benign cystic masses of the of the adnexa. From 2017 to 2021, we used diagnostic laparoscopy in 12 patients with PFTC. Sonographically, 5 of them were suspected of hydrosol-pinxmalignization. The rest went to surgery with diagnoses of cysts or hydrosalpinxes, and PFTC turned out to be an operational finding. Due to adequate examination of the longitudinal section of the affected fallopian tubes and sub operative histological studies, no errors were made during surgery [13]. The treatment of PFTC has undergone an inevitable evolution from purely surgical to combined with various types of radiation and chemoradiotherapy, then chemotherapy, and now adjuvant PCT with modern drugs according to clinical protocols [18].

We tried to summarize years of experience PFTC diagnosis and treatment at our oncological center. Most authors are unanimous that, first of all, treatment results depend on optimal cytoreduction [16,19,20,23]. There are almost no questions about the need for panhysterectomy with resection of the omentum in the case of PFTC. Should the lymph nodes be removed, which ones and in what situations? After all, some authors after lymphadenectomy received an improvement in treatment results, while others did not [6,21,22]. Clinical protocols have no clear coverage of this problem [18]. In our practice, we significantly improved survival in a group of 30 patients of all stages after extended panhysterectomies. Lymph nodes metastases were histologically confirmed in 46.6% (14/30) of them, including 27.3% (3/11) with first stages [24]. These data are consistent with a number of reports [22, 24].

Conclusions

The performed analysis shows that at all stages of the formation of care for patients with PFTC, it was believed that the central and independent prognostic factors are the stage of tumor development at the time of detection, the adequacy of the operation performed and adjuvant therapy. Undoubtedly, the prognosis is

worsened by tumor cells in the abdominal cavity and any tumor remnants larger than 1 cm. Treatment methods are gradually progressing. If in the 80-90 years of the 20th century, according to our data, the five-year survival rate of patients with PTC was 56.9%, then in the late 20th and early 21st centuries, it was 67.2%, including patients with stage I - 83.5% (20/24). The best results were obtained in separate groups of patients. These are lymph infusions of chemotherapy drug thiophosamide to 18 patients in 1970-1978 - a five-year survival rate of 70.6±11.0% 2 (12/17) CI 44-80 on average 102 months or 8.5 years, including 100% with stage I. In recent decades, in a group

of 58 patients who received adjuvant PCT according to clinical protocols with platinum and taxanes, five-year survival rate was 84.2±5.9 % (32/38) CI 69-94, including over 10 years 39.5±7.9% (15/38) CI 24 -57, of which in stage I – 92.9±6.9% (13/14) CI 66-100. Those who lived over 10 years were 39.5±7.9% (15/38) CI 24-57.

It remains the most difficult thing to suspect and detect PFTC on time, to prevent diagnostic errors when choosing the volume of surgery at the surgical stage of treatment and the scope of the operation at the surgical stage of treatment. Practically, with today's medical capabilities, errors can be minimized.

REFERENCES

1. Li C., Li J., Huang Q. et al. Developing and validating a novel nomogram used a competing-risks model for predicting the prognosis of primary fallopian tube carcinoma: a retrospective study based on the SEER database. *Ann Transl Med.* 2021 Mar; 9(5):378. doi: 10.21037/atm-20-5398.
2. Sumtsov G.A., Hyriavenko N.I., Starkiv M.P., Timakova E.A., Sumtsov D.G. Primary fallopian tubes cancer: incidence, problems of diagnosis and treatment. *Azerbaijan Medical Journal (ATJ).* 2019(3):123-9.
3. Trabert B., Coburn S.B., Mariani A. et al. Reported Incidence and Survival of Fallopian Tube Carcinomas: A Population-Based Analysis From the North American Association of Central Cancer Registries. *J Natl Cancer Inst.* 2018 Jul 1;110(7):750-757. doi: 10.1093/jnci/djx263.
4. Liao C.I., Chow S., Chen L.M. et al. Trends in the incidence of serous fallopian tube, ovarian, and peritoneal cancer in the US. *GynecolOncol.* 2018 May;149(2):318-323. doi: 10.1016/j.ygyno.2018.01.030.
5. Sun M., Bao L., Shen H. et al. Unexpected primary fallopian tube carcinoma during gynecological operations: Clinicopathological and prognostic factors analyses of 67 cases. *Taiwan J Obstet Gynecol.* 2019 Sep;58(5):626-632. doi: 10.1016/j.tjog.2019.07.008.
6. Romaniuk A., Gyryavenko N., Lyndin M. et al. A rare case of tuberculous salpingitis. *Interv Med Appl Sci.* 2016 Sep; 8(3):131-134. doi: 10.1556/1646.8.2016.3.2.
7. Gayam S., Babu C., V.V.S. L., Maddali S. Case report of primary serous adenocarcinoma of fallopian tube- a diagnostic dilemma. *Obs Rev: Jobstet Gynecol* 2018;4(4):73-76.doi:10.17511/joog.2018.i04.01.
8. Ma Z., Gao L., Li H. et al. Clinical characteristics of primary Fallopian tube carcinoma: A single-institution retrospective study of 57 cases. *Int J Gynaecol Obstet.* 2021 Jun;153(3):405-411. doi: 10.1002/ijgo.13497.
9. Romaniuk A., Gyryavenko N., Lyndin M. et al. Primary cancer of the fallopian tubes: histological and immunohistochemical features. *Folia Med Cracov.* 2016;56(4):71-80.
10. Eken M., Temizkan O., Kaygusuz E.I. et al. Primary carcinoma of the fallopian tubes: Analysis of sixteen patients. *Turk J Obstet Gynecol.* 2015 Jun;12(2):83-88. doi: 10.4274/tjod.67355.
11. Sumtsov D., Gladchuk I., Sumtsov G. et al. Problems of primary fallopian tube cancer diagnostics during and after surgery. *Reproductive Endocrinology.*2021;59:66–71. doi: 10.18370/2309-4117.2021.59.66-71.
12. Sumtsov D.H., Gladchuk I.Z., Kashtalian N.M., Sumtsov G.O. Practical means of preoperative diagnostics of primary fallopian tube cancer. *WiadLek.* 2021;74(2):282-287.
13. Hyriavenko N., Lyndin M., Sikora K. et al. Serous Adenocarcinoma of Fallopian Tubes: Histological and Immunohistochemical Aspects. *J Pathol Transl Med.* 2019;53: 236–43. doi: 10.4132/jptm.2019.03.21.
14. Hyriavenko N., Lyndin M., Sikora V. Et al. Neuroendocrine Tumor of the Fallopian Tube and Serous Adenocarcinoma of the Ovary: Multicentric Primary Tumors. *Turk Patoloji Derg.* 2023;39(2):161-166. doi: 10.5146/tjpath.2022.01589.
15. Liu L., Xu X., Jia L. et al. Primary fallopian tube carcinoma--a retrospective analysis of 66 cases. *Eur J GynaecolOncol.* 2015;36(2):161-7.
16. Li S., Yu M., Bai W., Shi J., Di W. Long-term follow-up of 46 cases of primary fallopian tube carcinoma: a single institute study. *Ann Palliat Med.* 2021 Aug;10(8):9122-9135. doi: 10.21037/apm-21-2083.
17. Timmins P., Kanbour A., Price F. Predictors for survival in fallopian tube carcinoma. *Priory Medical Journals [Internet].* [cited 2023 May 05]. Available from: <http://www.priory.com/med/fallopian.htm2>.
18. Jewell E., Sonoda Y. Fallopian Tube Cancer Treatment Protocols. *Medscape [Internet].* 2022 [cited 2023 May 05]. Available from: <https://emedicine.medscape.com/article/2056981-overview>

19. Tongsong T., Wanapirak C., Tantipalakorn C., Tinnangwattana D. Sonographic Diagnosis of Tubal Cancer with IOTA Simple Rules Plus Pattern Recognition. Asian Pac J Cancer Prev. 2017 Nov 26;18(11):3011-3015.
20. Ma X., Huang X., Chen C., Ding Y. A Preliminary Report Requiring Continuation of Research to Confirm Fallopian Tube Adenocarcinoma: A Non-Experimental, Non-Randomized, Cross-Sectional Study. Med Sci Monit. 2018 Jul 30;24:5301-5308. doi: 10.12659/MSM.909661.
21. Ludovisi M., De Blasis I., Virgilio B. et al. Imaging in gynecological disease (9): clinical and ultrasound characteristics of tubal cancer. Ultrasound Obstet Gynecol. 2014 Mar;43(3):328-35. doi: 10.1002/uog.12570.
22. Koo Y.J., Kwon Y.S., Lim K.T. et al. Para-aortic lymphadenectomy for primary fallopian tube cancer. Int J Gynaecol Obstet. 2011 Jan;112(1):18-20. doi: 10.1016/j.ijgo.2010.07.025.
23. Bao L., Ding Y., Cai Q. et al. Primary Fallopian Tube Carcinoma: A Single-Institution Experience of 101 Cases: A Retrospective Study. Int J Gynecol Cancer. 2016 Mar;26(3):424-30. doi: 10.1097/IGC.0000000000000648.
24. Sumtsov D., Hyriavenko N., Sikora V., Lyndin M., Sumtsov G. Ways of spread and metastasis of primary fallopian tube cancer: retrospective analysis from 1967 to 2019 // Azerbaijan Medical Journal (ATJ).2020 (3):70-8. doi: 10.34921/amj.2020.3.00

ПЕРВИЧНЫЙ РАК МАТОЧНЫХ ТРУБ: РЕЗУЛЬТАТЫ ДИАГНОСТИКИ И ЛЕЧЕНИЯ

**Д.Г.Сумцов^{1,2}, Г.О.Сумцов², Н.И.Гирявенко², С.А.Смиян²,
Н.В.Калашник², Е.А.Сикора, Н.Н.Рожковская³, И.З.Гладчук³**

¹Сумской областной клинический онкологический диспансер, Сумы, Украина

²Сумской государственный университет, Сумы, Украина

³Одесский национальный медицинский университет, Одесса, Украина

На материале Сумского областного клинического онкологического диспансера (253 больными первичным раком маточных труб) был проведен ретроспективный сравнительный анализ и представлено прогрессирование результатов диагностики и лечения первичного рака маточных труб за период с 1964 по 2021 год. В группе 163 больных за 1964 по 1995 годы пятилетнее излечение составило 56,9%, а среди 90 больных после 1995 года по 2021 г. – 67,2%. В 1996-2021 годах у больных, у которых адьювантная полихимиотерапия проведена по современным протоколам с препаратами платины и таксанов, пятилетнее излечение достигло 84,2±5,9% (32/38) доверительный интервал 69-94, в том числе у больных с I стадией – 92,9±6,9% (13/14) доверительный интервал 66-100.

Клинические проявления, адекватное использование современных дополнительных методов диагностики и лекарственных препаратов позволяют улучшить распознавание и лечение первичного рака маточных труб

Автор для переписки:

Смиян Светлана Анатольевна, к.мед.н., доц.
Сумский государственный университет, Сумы, Украина
Электронная почта: s.smiyan@med.sumdu.edu.ua

Author for correspondence:

Smiian Svitlana Anatolyivna, PhD, Assoc. Prof., MD.
Sumy State University, Sumy, Ukraine
E-mail: s.smiyan@med.sumdu.edu.ua