



## MODERN METHODS OF DIAGNOSIS OF VARIOUS HISTOLOGICAL TYPES OF OVARIAN TUMORS

**Uzakova N. G.**

Master of the Department of Oncology and Radiology  
Andijan State Medical Institute

**Yakubbekova S.S.**

Assistant Department of Oncology and Clinical Radiology

**Ziyaeva S. T.**

Resident doctor of Specialized Scientific and Practical Medical Center of Oncology and Radiology Andijan Branch

**Mamarasulova D. Z.**

Doctor of Medicine, Docent, Department Of Oncology and Radiology, Andijan State Medical Institute  
Specialized Scientific and Practical Medical Center of Oncology and Radiology Andijan Branch, Andijan, Uzbekistan

---

### RESUME

*According to modern scientific literature, among all ovarian tumors, borderline types range from 5 to 15%. In this study, the clinical and morphological features and histological variants of borderline ovarian tumors were analyzed. The results of the study showed that borderline ovarian tumors suffered from a large number of serous (46.8%), mucinous (42.7%), other types of enometrioid, mesonephroid, Brenner and mixed tumors, respectively.*

**KEY WORDS:** ovary, tumor, cyst, cystoma, borderline type tumors.

---

### RELEVANCE OF THE TOPIC

Malignant ovarian tumors, due to their severe clinical course and high mortality, are one of the most important problems of practical oncology[4]. Ovarian cancer accounts for 4-6% of the total female incidence of malignant tumors and occupies the 7th place in it, and among gynecological tumors, the third-after cancer of the body and cervix. In the structure of mortality, ovarian cancer is on the 4th place, ahead of cancer of the body and cervix. In Russia, ovarian cancer is detected annually in more than 11,000 women (10, 17 per 100,000)[1]. Over the past 10 years, the increase in morbidity was 8.5%, and mortality was 8.7%, i.e., mortality is growing almost parallel to morbidity[6,7].

The reason for the high mortality rate of ovarian cancer patients is that the majority (75-80%) of patients are treated in advanced stages. Among those treated in the early stages of the disease, the five-year survival rate is 60-100%, and in the third and fourth stages it does not exceed 10% [3].

Many authors [5] believe that the late diagnosis of ovarian cancer is due on the one hand to the absence or lack of expression of subjective disorders in patients and, consequently, late access to medical care, on the other hand, to the limited clinical methods of research, and as a result, a long period of examination, in some cases with control studies with long intervals[3].

All this contributes to the perception of ovarian cancer by doctors and patients as a fatal disease, the possibility of a cure for which is real only if it is found accidentally during medical examinations or during examinations conducted for another reason[6].

### THE PURPOSE OF THE STUDY

To study the state of diagnosis of ovarian cancer on the example of the Andijan region, to evaluate the informativeness of modern methods of instrumental and laboratory diagnostics and to form a



rational algorithm for their use to accelerate recognition and start treatment.

## MATERIALS AND METHODS OF RESEARCH

The work was carried out on the basis of the Andijan branch of the Republican Specialized Scientific and Practical Center of Oncology and Radiology. The materials for studying the morbidity, mortality, and neglect of ovarian cancer in statistics

and dynamics were the annual reports of this center for 2018-2020. In total, the data of examinations of 457 women who passed through the department of radiation diagnostics of the Andijan branch of the Republican Specialized Scientific and Practical Center of Oncology and Radiology were processed, of which malignant neoplasms of the ovaries during a comprehensive examination were established in 202, including 180 patients-cancer, which were taken into development.

**Table 1**  
**Distribution of patients with OC by stage**

Stages of the disease	Absolute number	%
I stage	30	16,6
II stage	13	7,2
III stage	109	60,6
IV stage	28	15,6
Total	180	100%

As can be seen from Table 1, the bulk of those admitted to treatment had stage III (60.6%), and stage I-II accounted for 23.8%, i.e., patients with stage III-IV totaled 76.2%.

The possibilities of differential diagnosis were studied by comparing the data of clinical and

instrumental diagnostics in 180 patients with ovarian cancer and 106 patients with benign tumors.

## RESULTS

When detecting a pathological formation in the pelvis, to assess it as a possible ovarian tumor, we analyzed the following echographic criteria:

**Table 2**  
**Ovarian tumor size**

Ovarian tumor size	Absolute number	%
An exaggerated ovary	22	15,3
40-60 mm	21	14,7
60-100 mm	44	30,8
100 mm	56	39,2
Total	143	100

In our study (Table.2) the largest proportion is accounted for by formations with a size of 100 mm or more (39.2%), and 1/4 of the cases were represented by giant cysts. Slightly less than 1/3 cases are cysts measuring 60-100 mm.

Consequently, almost 70% of observations were made by formations larger than 60 mm. And only in 15.3% of cases, the cancer was in the non-enlarged ovary.

**Table 3**  
**The ratio of the size and stage of ovarian cancer**

Tumor size	Number patient	Stage	Number patient	weight in %
An exaggerated ovary	22	1-II	3	13,6
		III	13	59,1
		IV	6	27,3
40-60 mm	21	1-II	5	23,8
		III	14	66,7
		IV	2	9,5



60-100 mm	44	1-11 III IV	8 27 9	25 54,5 20,5
100 mm	56	1-H III IV	13 36 7	23,2 64,3 12,5
Total	143		143	100%

We specifically considered a group of giant ovarian cysts, i.e. cysts that occupy the entire pelvis and almost the entire abdominal cavity, and in this

group, ovarian cancer in the Sh-1U stage was 66.8%, and in the 1-11 stage-33.2%.

**Table 4**  
**Structure of ovarian malignancies**

Structure of education	Number of patients	specific gravity, %
Liquid with partitions	5	3,5
Liquid without partitions	4	2,8
Solid	15	10,5
Solid-cystic	104	72,7
Cystic non-enlarged ovary	15	10,5
	143	100%

The most common were 3 variants of the tumor structure: the main one was solid-cystic (72.7%), the other variants were mostly solid structure and the tumor in the non-enlarged ovary was less common (10.5%).%

Comparison of the echostructure and histological structure of the formations showed the following (Table 4 )

**Table 5**

Tumor structure	Number of patients	Number stage	Number of patients	%
Cystic	9	I-II	4	44,4
		III	4	44,4
		IV	1	11,2
Solid-cystic	104	I-II	26	25
		III	68	65,4
		IV	10	9,7
Solid	15	I-II	3	20
		111	9	60
		IV	3	20
Cystic non - ovarian ovary	15	I-II	2	13,3
		III	10	66,7
		IV	3	20
Total	143		143	100%

As can be seen from Table 5, different variants of the echostructure differed in their

histological structure. Solid-cystic formation in 6 cases (28.6%) was solidified adenocarcinoma, in 10 cases (47.6%) papillary cancer of various degrees of differentiation, in 1 case (4.8%) mucinous cancer,



and in 4 cases (19%) serous-papillary cancer. Giant cysts with septa and a solid component in the majority - 27 cases (48.2%) were mucinous cancer, and in 16 cases (28.6%) solid-papillary adenocarcinoma and in 13 cases (23.2%) had the structure of papillary adenocarcinoma in a borderline tumor. The cancer in the enlarged solid ovary was also distinguished by a variety of histological structures: in 2 cases (28.55%) it was glandular-papillary cancer, in 1 case (14.3%) it was mucus-forming adenocarcinoma, psammomatous cancer and dark cell adenocarcinoma, and in 2 cases (28.55%) it was low-grade cancer.

The relationship between the size of the tumor and the amount of solid component was observed. In our study, 15 solid structures were identified, their size ranged from 23 to 98 mm. While the size of solid cystic formations, and their number in our observation was 128 cases, was from 43 mm to giant cysts that filled the entire abdominal cavity and the pelvic cavity. Thus, ovarian cancer of a solid structure had an average size of 74.4 mm, and ovarian cancer of a solid-cystic structure of 187.8 mm.

This partly explains the paradoxical relationship between the size of the process and its stage. In large-sized tumors, the main volume is not occupied by the tumor itself, but by its product - various kinds of exudate.

Mucinous ovarian cancer in 27 cases (90.0%) had an echographic picture of a giant cyst with septa and a solid component, and in 1 case (3.33%) had a solid-cystic structure, the structure of a cystic - altered ovary and a fluid formation with papillary growths.

Another common type of serous ovarian cancer is papillary cancer. In our observation, in 16 cases (38.1%), it had the form of a giant cyst with septa and a solid component, in 2 cases (4.7%) in the form of a solid non-enlarged ovary, in 10 cases (23.8%) in the form of a solid-cystic formation, in 1 case (2.4%) in the form of a multi-chamber formation with a suspension, in 4 cases (9.5%) in the form of a solid formation and in 9 cases (21.5%) in the form of a liquid formation with papillary growths.

## CONCLUSION

Different variants of the echostructure differed in their histological structure. Solid-cystic formation in 6 cases (28.6%) was solidified adenocarcinoma, in 10 cases (47.6%) papillary cancer of various degrees of differentiation, in 1 case (4.8%) mucinous cancer, and in 4 cases (19%) serous-papillary cancer. Giant cysts with septa and a solid component in the majority - 27 cases (48.2%) were mucinous cancer, and in 16 cases (28.6%) solid-papillary adenocarcinoma and in 13 cases (23.2%) had the structure of papillary adenocarcinoma in a borderline tumor. There was also a variety of

histological structure of cancer in the ovary with a solid structure: in 2 cases (28.55%) it was glandular-papillary cancer, in 1 case (14.3%) it was mucus-forming adenocarcinoma, psammomatous cancer and dark cell adenocarcinoma, and in 2 cases (28.55%) it was represented by low-grade cancer

## REFERENCES

1. E. M. Axel // *Statistics of malignant neoplasms of female genital organs. In: Educational course of the European Society for Medical Oncology. Moscow, June 20-21, 2006, pp. 196-198.*
2. L. V. Akulenko, K. I. Zhordania, V. P. Kozachenko et al. *Clinical features of familial cancer of the female reproductive system // High technologies in oncology. Proceedings of the V All-Russian Congress of Oncologists on October 4-7, 2000, - Kazan, 2000, vol. 2, - p. 440.*
3. A. S. Akhmedova // *Improvement of the clinical and laboratory concept of use .CA-125 in patients with ovarian cancer / / Autoref. diss.cand. biol. nauk, - M., 2003, 25 p.*
4. S. A. Akhmedova, M. P. Mishunina, N. S. Sergeeva et al. *The level of the tumor - associated antigen CA125 paracentesis in patients with ovarian cancer // Obstetrics and gynecology. - M., No. 3, 2001, C. 44.*
5. L. A. Ashrafyan, E. G. Novikov *Gynecological aspects in the trends of incidence and mortality from cancer of the reproductive system / / Journal of obstetrics and women's diseases-St. Petersburg, No. 1, 2001, Volume XLX, - P. 27-33.*
6. Asmolov A. G. *Personality psychology-Moscow: Akademiya, "Smysl" 2007. - P-528.*
7. D. Aliyeva. *Data from the Statistics Department of the Republican Cancer Research Center.- Tashkent, 2015*
8. E. V. Bakhidze. *Influence of reproductive function on the pathogenesis of ovarian cancer / / Proceedings of the scientific and practical conference //New approaches to screening, diagnosis and treatment of ovarian tumors//. Veliky Novgorod, May 17-18, 2001 - St. Petersburg, 2001. - p. 25.*
9. A. I. Berishvili / / *Extended and combined operations in the complex treatment of ovarian cancer of the III-IV stage / / - M., 2001. Diss.Cand. 'med. nauk, 152 p.*
10. L. M. Berstein *Hormonal carcinogenesis. - St. Petersburg: Nauka. 2000-199 p.*