

THE ROLE OF VIRAL AND MYCOPLASMA INFECTION IN THE GENESIS OF THE DRAINED OVARIAN SYNDROME

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Abstract. To identify the role of viral and mycoplasma infection in the genesis of the pathological process were studied by smear bacterioscopy and bacteriological examination of the discharge of the urogenital organs of 115 women with ovarian depletion syndrome. The results of smear bacterioscopy evaluation showed that in women with hormonal disorders, mycoplasma infection is found in 5.7% of cases. In women with inflammatory processes, the percentage of detection of mycoplasma infection increases to 47.3%. In women with peritubal adhesions and purulent-septic complications, *Urealiticum* and *M.hominis* were found in 78% of cases, gonorrhea - in one, in three chlamydia and in five patients - trichomoniasis.

Keywords: microplasma infection; pathological process; bacterioscopy smear; hormonal disorders; mycoplasma infection; peritubal adhesions; purulent-septic complications; gonorrhea; tumor processes; chronic inflammation; viral etiology; follicles; autoimmune diseases; ovarian exhaustion; functional diagnostics; inflammatory process; obstetric and perinatal complications.

The role of viral and mycoplasma infection in the genesis of depleted ovary syndrome

To determine the role of viral and mycoplasma infection in the genesis of pathological process were studied smear and bacteriological examination separated urinary organs 115 women with ovarian failure syndrome. The evaluation results smear showed that in women with hormonal disorders mycoplasma infection detected in 5.7% of cases. In women with inflammatory processes detection rate of mycoplasma infection is increased to 47.3%. Women with peretubarnym adhesion process and purulent-septic complications and *U. Urealiticum* *M.hominis* detected in 78% of cases, gonorrhea - at one, three and five chlamydia cases - trichomoniasis.

Ovarian wasting syndrome (SIA) is a clinical syndrome, the typical manifestation of which is stable or episodic hypergonadotropic amenorrhea in women younger than 40 years old [3,5,7].

Literature data indicate that in the pathogenesis of SIA, along with other factors , infection plays an important role. Thus, the research of L.I. Maltseva. (2010) in 82 patients with apoplexy, tumor and tumor-like processes in the ovaries showed that destructive processes that developed in the ovary are the result of activation of a chronic inflammatory process caused in the vast majority of cases (98.9%) by chlamydia, myco- or ureaplasma infections.

In 2005, there were about 45 million new cases of treatable sexually transmitted diseases (STDs) reported by the WHO among the population aged 15 to 49 years. However, against the background of a decrease in the incidence of syphilis, there is a rapid increase in other STDs, especially of viral etiology: HIV, hepatitis, herpes, papillomaviruses, etc. [1,6,9] Activation and recurrence of these infections during pregnancy lead not only to serious obstetric and perinatal complications (threat of termination of pregnancy, spontaneous abortion; premature birth;

development of congenital malformations, intrauterine infection, hypoxia, malnutrition, etc.), but also gynecological complications (infertility, early extinction of reproductive and menstrual function, premature and pathological menopause) in women of young, sexually active reproductive age [2,4,8].

It has been established that chemotherapy - or radiotherapy dramatically reduces the number of follicles and can cause FLE. Despite the fact that autoimmune diseases are observed in 10-20% of women with SIL, the role of autoimmune processes and some infections in the development of this pathology remains not fully understood. This circumstance dictates the need to continue research on the bacteriological and histomorphological aspects of ovarian wasting syndrome.

The purpose of our study was to study the role of viral and mycoplasma infection in the genesis of ovarian wasting syndrome.

Material and research methods For the period from 2010 to 2013, we examined 115 women with menstrual dysfunction, secondary infertility, benign ovarian masses and inflammatory processes of the genitals in the city maternity hospital No. 6, the gynecological department of the Medical Department of the State Customs Service of Tashkent and the RSNPMCAG of the Ministry of Health of the Republic of Uzbekistan. The average age of the surveyed women was 34.8 ± 0.83 years.

To make a diagnosis, all surveyed underwent functional diagnostics tests, ultrasound of the genitals, study of basal (rectal) temperature, determination of the karyopycnotic index, folliculometry, study of the elongation of the cervical mucus, pupil symptom, fern, etc. The comparative analysis of functional diagnostics tests in women of the main group was significantly higher than the control values. On the basis of these tests, the diagnosis was made of FIA. To identify infection, all women underwent smear microscopy and bacteriological examination of the urinary tract discharge. The staining of smears was performed according to Gram, hemotoxylin and eosin, according to Romanovsky-Giemsa (for chlamydia), as well as methylene blue (for Trichomonas). Identification of infection with Herpes simplex virus, U. Urealyticum, M. hominis, Chl. trachomatis, Gardnerella vaginalis was carried out by ELISA, PIF using diagnostic antibodies "NPF LAB-diagnostics".

Statistical processing of clinical trial data was carried out on a personal computer Hewlette Packard Pentium V on Windows 98 using Microsoft Excel 98, including built-in aggregation.

Results and discussion

After the diagnosis of FIA, the patients were divided into three groups:

Group 1 consisted of 22 women with hormonal disorders and 19 patients operated on for retinal cysts and altered ovaries. Group 2 consisted of 28 women with inflammatory processes and 24 patients operated on for cysts, cystomas and polycystic diseases.

Group 3 consisted of 16 women with peritubal adhesions, purulent-septic complications and 6 patients operated on for about pyovar, pyosalpinx and pelvioperitonitis.

As a result of the research, the following data were obtained: in 1 - group of women with hormonal disorders, mycoplasma infection U. Urealyticum and M. hominis was found in 12.1%, Herpes simplex virus - 22.9%, Cytomegalovirus - 12.1%. In group 2 with inflammatory processes, the percentage of detection of mycoplasma infection is 13.4%, definition of CMV - 11.3%, HSV - 33.6%. Moreover, if the women of the 1st group showed mono-infection, then the

women of the 2nd group had microbial flora with *Chl.trachomatis* in 15.3%, *Gardnerella vaginalis* - 5.7%. In women of 3 - groups with repetitive adhesions and purulent-septic complications, Cytomegalovirus was found in 9.0% of cases, complications of *Urealiticum* and *M.hominis* infections - in 45.4% of cases, one had gonorrhoea, three had chlamydia and five patients - trichomoniasis. CMV was detected in 58.9%, HSV - in 81%. In this group, a high degree of contamination is much less common in comparison with groups 1 and 2.

Thus, the results of our studies have shown that the development of follicular and tecalutein cysts is characterized by the presence of a mixed infection. The prognostic criteria for the risk of developing urgent ovarian pathology are the presence of recurrent bacterial vaginosis, chronic endocervicitis and the detection of *Ur. urealitycum*, in association with *Streptococcus aureus* in the woman's cervical canal.

Early shutdown of ovarian function as a result of inflammatory processes, in turn, leads not only to pronounced clinical manifestations of estrogen deficiency, but also to such formidable complications as vegetative-vascular, psycho-emotional and urogenital disorders, which significantly reduces the quality of life of young women.

Conclusions

1. Women with urea and mycoplasma infections in the reproductive system should be classified as a high-risk group for opportunities for the development of SIA.

2. The severity of SIA depends on the frequency and duration of recurrences of genital infections.

3. With urea and mycoplasma infections in the reproductive system, the development of a chronic inflammatory process of an autoimmune nature with damage to the ovarian tissue and depletion of the follicular apparatus is noted.

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