World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-30, January 2024
ISSN: 2749-3644

THE IMPORTANCE OF EMBRYOTROPIC AUTOANTIBODS IN THE ASSESSMENT OF THE IMMUNE SYSTEM OF WOMEN WITH ADENOMYOSIS

Zebo Zafarjonovna Askarova
Samarkand State Medical University, Department of Obstetrics and Gynecology No. 1, PhD assistant of the department
Nilufar Avazovna Faizullaeva
Samarkand State Medical University, Independent applicant of the Department of Obstetrics and Gynecology No. 1
Madina Zafarjanovna Kurbaniyazova
Urgench branch of Tashkent medical academy, Department of Obstetrics and Gynecology, assistant of the department

Article history:
Received: November 24th 2023
Accepted: December 20th 2023
Published: January 28th 2024

Abstract:
We observed perimenopausal women with adenomyosis; in order to assess the immunoreactivity of the body, embryotropic antibodies were determined in the blood serum using the ELIP test.
The identified shifts in immunoreactivity are evidence of the readiness of trigger mechanisms in the implementation of newly formed foci of endometriosis. Probably, the solution to the problems of preventing the recurrence of internal endometriosis (adenomyosis) lies in both correcting the state of the immune system, taking into account reactivity, and the endocrine-metabolic adaptation-homeostatic reactions mediated by it in the female body.

Keywords: fetal autoantibodies, adenomyosis, perimenopause, relapse.

INTRODUCTION: Endometriosis is a process in which benign growth of tissue occurs outside the uterine cavity, similar in morphological and functional properties to the endometrium. Difficulties in managing patients with endometriosis are associated with the extremely variable clinical picture and severity of the disease; tactics depend on the age of the patient, the form and stage of the disease, the nature of symptoms, reproductive goals, as well as the risks, side effects and economic profitability of treatment. In some cases, endometriosis is considered a chronic relapsing disease that requires constant attention and treatment [2,6].
Endometriosis is traditionally divided into genital and extragenital, and genital, in turn, into internal, adenomyosis (endometriosis of the uterine body) and external (endometriosis of the cervix, vagina, perineum, retrocervical region, ovaries, fallopian tubes, peritoneum, rectal uterine cavity). There are more than 20 histological variants of external endometriosis, including intraperitoneal or subperitoneal (vesicular - cystic or polypoid), as well as muscular fibrous, proliferative, cystic (endometrioid cysts). In recent years, "internal endometriosis" is increasingly considered as a completely special disease and is designated by the term "adenomyosis"[1,4].
ICD 10 – International Classification of Diseases, 10th Revision N80.0 Uterine endometriosis, adenomyosis. N80.1 Ovarian endometriosis. 8 N80.2 Endometriosis of the fallopian tubes. N80.3 Endometriosis of the pelvic peritoneum. N80.4 Endometriosis of the rectovaginal septum and vagina. N80.5 Intestinal endometriosis. N80.6 Endometriosis of the skin scar. N80.8 Other endometriosis. N80.9 Endometriosis, unspecified [7,9,10].

Adenomyosis is a benign pathological process characterized by the appearance in the myometrium of epithelial (glandular) and stromal elements of endometrial origin. There are three degrees of spread of adenomyosis, as well as its focal, cystic and nodular forms [8].

PURPOSE OF THE STUDY: By determining embryonic autoantibodies, predict relapses of adenomyosis in perimenopausal women.

MATERIALS AND METHODS OF EXAMINATION. We analyzed the case histories of 35 patients with adenomyosis and 20 women with relapses of adenomyosis who received inpatient treatment in the gynecological department of the multidisciplinary clinic of SamState Medical University from January 2023 to December 2023. The control group consisted of 23 potentially healthy women. The age of the women ranged from 43 to 51 years, with an average of 46.9±1.6 years. A comprehensive clinical and laboratory examination included examination of the external genitalia, vagina, and cervix in speculums; bimanual examination, ultrasound examination of the pelvic organs and mammary glands, endoscopic examination of the uterine cavity, histological examination of biopsy specimens, determination of fetal autoantibodies in blood serum using the ELIP test.

THE CRITERIA FOR INCLUSION IN THE STUDY WERE THE FOLLOWING DATA: perimenopausal age,

World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-30, January 2024
ISSN: 2749-3644

confirmed diagnosis of adenomyosis, absence of antibacterial therapy over the past 3 months for an objective assessment of infection status, absence of hormonal therapy over the past 3-6 months. A necessary condition for participation in the study was informed consent.

Exclusion criteria: the studies did not include patients with coagulopathies and iatrogenic bleeding, as well as with malignant diseases of any location.

When diagnosing adenomyosis, the following classification was used:[3,6,7]

• stage I – the pathological process is limited to the submucosa of the body uterus;

• stage II – the pathological process moves to the muscle layers;

• stage III – spread of the pathological process throughout the entire thickness
the muscular layer of the uterus to its serous covering;

• stage IV – involvement in the pathological process, in addition to the uterus,
parietal peritoneum of the pelvis and adjacent organs.

• Adenomyosis can be diffuse, focal or nodular and cystic.

Table 1
Types of adenomyosis in examined women, M±m

Types of adenomyosis	I-group n=35	II-group n=20
diffuse	25(71,4±7,6%)	11(55±11,1%)
focal; nodal cystic	10(28,6±7,6%) 6(17,2±6,4%) 4(11,4±5,4%)	9(45±11,1%)* 5(25±9,7%) 4(20±8,9%)

Notice:

* -p <0,05 reliability of differences between groups I and II

When considering the types of adenomyosis in the examined patients (Table 1) by group, the following was revealed: diffuse adenomyosis in the group of patients with recurrent adenomyosis was 11 (55 ± 11.1%), and nodular adenomyosis occurred in 9 (45 ± 11.1%) patients, which is relatively significant compared to its frequency in group I ($p<0.05$).

To determine the immunoreactivity of the body and to predict relapses of adenomyosis, the determination of fetal autoantibodies in blood serum by ELISA was used. The results of determining serum immunoreactivity obtained using ELISA are expressed as a percentage of the reaction level of the reference control serum. Physiological knowledge of immunoreactivity in more than 95% of clinically healthy individuals is in the range of values from 15 to 40% classification group K1 (normal group); K2 (group of moderate deviations) – EA level ranging from 25 to 65%; K3 (group of moderate deviations) – from 45 to 100%; K4 (pronounced deviations) – from 65 to 150%; K5-(very strong deviations); K6 – exquisite deviations.

Before the analysis, the following preparations were carried out:

• Blood was donated on an empty stomach in the morning

• It was recommended to refrain from food load on the eve of the test

• 2 days before the examination, drinking alcoholic and carbonated drinks was prohibited

• Psycho-emotional stress was excluded

If the intensity of the reaction of the test serum with any of the studied proteins - antigens was 5-40% of the intensity of the reaction of the test reference serum, it was considered normal. If the intensity of the reaction of the test serum with any of the proteins was 41% or more of that of the reference serum, the serum was classified as a group of hyperreactive deviations. If the intensity of the reaction of the test serum with any of the proteins studied was below 5%, it was classified as a hyporeactive group.

World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-30, January 2024
ISSN: 2749-3644

Table 2
Distribution of women depending on the results of the ELIP test

№	groups	K1	K2 hypo	K2 hyper	K3 hypo	K3 hyper	K4 hypo	K4 hyper	K5 hypo	K5 hyper	K6 hypo	K6 hyper
1	EH n=35	1	19		5	1	9					
2	RecurrenceEH n=20	0	0		4	1	7	1	4	1	2	
3	Control n=23	21	2									
	Total n=78	22	21		9	2	16	1	4	1		2

Notice:

EH - endometrial hyperplasia

As can be seen from Table 2, in the control group of 21 women, the intensity of the reaction of the studied blood serum ranged from 5 to 40%, i.e. 91.3% of women belonged to the qualified group K1 and only two patients belonged to group K2 (hyporeactivity).

In the group of women with endometrial hyperplasia, the following results of the ELIP test method were revealed: one patient was normoreactive, hyporeactivity was diagnosed in 33 out of 35 patients, and hyperreactivity was diagnosed in one.

When adenomyosis relapsed, not one patient had normoreactivity; in 17 out of 20 patients hyporeactivity was observed, and in 3 cases hyperreactivity was observed.

Thus, the results of the ELIP test in women with relapses of adenomyosis are more interesting, where normoreactivity was diagnosed in only one case; in other cases, shifts in immunoreactivity were observed, mainly towards hyporeactivity. The identified shifts in immunoreactivity are evidence of the readiness of trigger mechanisms in the implementation of newly formed foci of adenomyosis. Probably, the solution to the problems of preventing the relapse of adenomyosis lies in both correcting the state of the immune system, taking into account reactivity, and the endocrine-metabolic adaptive-homeostatic reactions mediated by it in the female body.

REFERENCES:

1. Adamyan L.V., Demidov V.N., Gus A.I. and others. Diagnosis of endometriosis // In the book: "Radiation diagnostics and therapy in obstetrics and gynecology." – M.: GEOTAR-Media, 2012. – P.409–451.
2. Ailamazyan E.K. Gynecology: from puberty to menopause.— M.: MEDpress, 2017.— 512 p.
3. Alieva D.A., Askarova Z.Z., Karimova G.S., The importance of hysteroscopy in the diagnosis of abnormal uterine bleeding in perimenopause - Issues of science and education. 2020.-20-26s
4. Askarova Z.Z. Frequency of pathomorphological changes in the endo- and myometrium in the development of abnormal uterine bleeding in perimenopausal women - Achievement of science and education, 2020.-113-116p.
5. Kolotovkina A.V., Kalinina E.A., Kogan E.A. Morphofunctional features of the endometrium in patients with endometriosis-associated

World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-30, January 2024
ISSN: 2749-3644

infertility (literature review) // Consilium medicum. – 2012. – No. 4. – P.74-79.
6. ASRM (American Society for Reproductive Medicine). The Practice Committee. Endometriosis and infertility: a committee opinion // Fertil Steril. – 2012. – Vol. 98. – P. 591–598.
7. Askarova Z. Z., Alieva D. A., Kurbaniyazova M. Z. IMPROVING EXAMINATION METHODS FOR PATIENTS WITH ABNORMAL UTERINE BLEEDING IN PERIMENOPAUSAL WOMEN //Euro-Asia Conferences. – 2021. – T. 1. – No. 1. – pp. 148-151
8. Askarova, Z.Z., Saparbayeva, N.R., Kurbaniyazova, M.Z. and Aliyeva, D.A., 2021. VALUE OF HYSTEROSCOPY AND GENETIC RESEARCH OF WOMEN WITH ABNORMAL UTERINE BLEEDING IN PERIMENOPAUSE. Eur J Mol Clin Med, 8(1), pp.409-416.
9. Banno K., Kisu I., Yanokura M., et. al. Progestin therapy for endometrial cancer: The potential of fourth-generation progestin (Review) // Int J Oncol. 2012 – Vol. 40. – No. 6. – P. –1755-62
10. Pearce C.L., Templeman C., Rossing M.A. et al. Association between endometriosis and risk of histological subtypes of ovarian cancer: a pooled analysis of case-control studies // Lancet Oncol. – 2012. – Vol. 13. – No. 4. – P. 385–394.