bleeding was observed only in patients with placenta increta (100% cases) and full variant of placenta previa (8.3% of cases), pathological blood loss was observed only in patients with full placenta previa (37.5%). In other cases, blood loss was insignificant and did not require autoplasma replacement transfusion, as a result of which the plasma had to be utilized.

Based on the above, we believe that the donation of autoplasma is appropriate in patients with diagnoses such as: placenta increta and the full variant of the placenta previa. According to previously calculated statistics in the Perinatal Center of Khabarovsk, among 27 patients who underwent surgeries from 2016 to 2018 (6 months), with placenta increta, massive bleeding was observed in 100% of cases [3]. This fact confirms that autoplasma donation is a necessary part for preparation before the cesarean section. In other cases, autoplasma donation is impractical.

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RATIONAL METHODS OF DIAGNOSTICS OF CHRONIC ENDOMETRITIS TYPES AFTER PREGNANCY TERMINATION AMONG WOMEN WITH CHRONIC PYELONEPHRITIS AND ANEMIA

DOI 10.25789/YMJ.2019.65.13

ABSTRACT

The article shows different effectiveness of endometrial evaluation methods among women with pregnancy termination on the background of CP and anemia, their complementarity in the allocation of CE types – a proven cause of early reproductive losses. Clear connection is obvious between the lack of pregravid preparation on the background of chronic EGD and high CE frequency, the diagnosis and the treatment of which at the pre-grading stage seem to be the best tactics for the prevention of various degrees of violations of the “fetal-endometrial” interaction.

Objective of the research: to evaluate the effectiveness of the diagnostic stage in the management of women after abortion on the background of chronic pyelonephritis (CP) and anemia.

Materials and methods of the research: A group of 431 women with terminated pregnancy due to anemia (n=246) and CP (n=185) was prospectively examined.

Research methods: clinical and statistical analysis, sonography, hysteroscopy, pathomorphological examination of the biopsy of the uterine mucosa/removed material with visually obvious pathology and/or revealed by sonography.

Results of the research: The effectiveness of diagnosing chronic endometritis types (hypoplastic and hyperplastic) with hysteroscopy is shown and confirmed morphologically – with the allocation of characteristic features, typical of each group.

Indicators of sensitivity and specificity of methods for diagnosing the hyperplastic type (92.6% and 66.7% - sonography, 97.5% and 77.2% - hysteroscopy) were higher than with the hypoplastic one (79.2% and 68.6% - sonography, 89.6% and 74.4% -hysteroscopy). The histological verification of the CE (chronic endometritis) pattern took place in 83.5%, with a greater frequency of the hypoplastic variant in CP (50.3% versus 24.8% in anemia) ($p < 0.05$) and hyperplastic - in half of the samples with anemia - one and a half times more often ($p < 0.05$). The amount of samples with an “incomplete” CE morphological picture in the EGD (extragenital diseases) group was 39.2%.

Detailing of endometrial histological studies in a group of women with pregnancy termination on the EGD background showed the presence of

endometrial polyps - in 5.5%, intrauterine synechium - 2.0%, unchanged mucosa - 9.3%.

Different effectiveness of endometrial evaluation methods among women with pregnancy termination on the background of CP and anemia shows their complementarity in the allocation of CE types – a proven cause of early reproductive losses. Clear connection is obvious between the lack of pregravid preparation on the background of chronic EGD and high CE frequency, the diagnosis and the treatment of which at the pre-grading stage seem to be the best tactics for the prevention of various degrees of violations of the "fetal-endometrial" interaction.

Conclusion:

Clarification of the concepts of CE pathogenesis in hypo- and hyperplastic types during a comprehensive study of women with abortion on the EGD background will allow for differentiated management tactics, involving a set of measures to restore the structural and functional viability of the uterine mucosa.

Keywords: hypoplastic and hyperplastic types of chronic endometritis, hysteroscopy, endometrial pathomorphology, extragenital diseases.

Introduction. Seeing chronic inflammation of the uterus as the leading cause of non-developing pregnancy is a fact, fully recognized by the world community, but in practice we have a big number of unrecognized diseases, mostly of low-intensity character on the background of dominant abortive Russian "mentality" and the lack of rehabilitation procedures for the injured by surgical manipulations inflamed endometrium. [4]. Predictors of endometrial inflammation are thought to show a tendency of adherence to aggressive tactics of uterus curettage instead of medical evacuation during non-developing pregnancy and less traumatic aspiration emptying in cases of abortion / miscarriage [2,8].

The statement of the high frequency of infectious and inflammatory diseases, obstetric and perinatal complications among pregnant women with anemia and chronic pyelonephritis (CP) does not exclude the possibility of exacerbation of the inflammatory process in the uterus [10]. The background predisposing to reproductive losses, according to some authors, is an imbalance between the hormonal and immune systems of the body and pathogens – representatives of the genital tract loci biocenosis [1].

Echographic screening for CE detection is considered to be uninformative, but it is believed to be necessary to focus on the individual features that contribute to its diagnosing [7]. The non-invasive assessment of the endometrium is complemented by dopplerometry of the organ vessels, allowing to estimate trophic reserves, to identify the relationship of hemodynamic and the degree of degenerative changes [5].

The recognition of hysteroscopy as an effective method of diagnosis is undeniable, especially with the appearance of works on the possibilities of CE types gradation on the basis of individual hysteroscopic stigmas [10, 13]. According to the data, it is the visual CE signs that make it possible to verify variants of the disease, the diagnosing difficulty of which is associated with local and erased forms. Suggestions to consider a change in the colour of the endometrium and its thickness as markers of chronic endometrial inflammation are thought by some researchers to be sufficient for identification, while others report only a third of cases in the existing disease [11, 12].

Opinions on the specificity of echography and hysteroscopy in CE detection are ambiguous, in particular, due to the comparable frequency of individual signs of the disease in various pathomorphological forms [9, 13]. The most objective method of diagnosing the disease is the pathomorphological study of the endometrium, with clearer criteria in contrast to the insufficiently specific echographic and sonographic markers [12]. Overcoming of low detection rate of the disease is achieved by unification of the criteria for non-invasive diagnostic methods in terms of variants of uterus chronic inflammation. The complexity of CE morphological interpretation is determined by histobiological characteristics, typical of different phases of the menstrual cycle, which indicate the necessity for conducting research in the early proliferative phase. Varying degrees of lymphocytic infiltration and stroma fibrosis also present an incomplete morphological picture in the chronic inflammatory process in the uterus showing one of the signs – inflammatory infiltrates or lymphoid follicles [12].

Discussions continue on the validity of CE detection, taking into account dystrophic changes in the mucosa and factors predisposing to their development, along with allegations of compliance of clinical and morphological forms of inflammation to their morphological manifestations [3]. It seems that the clarification of the pathomorphosis of CE forms, reflecting different pathogenesis of the disease, will allow for a differentiated choice of treatment tactics for women with reproductive failures and chronic EGD (extragenital diseases).

Objective of the research: to evaluate the effectiveness of the diagnostic stage in the management of women after abortion on the background of CP and anemia.

Materials and methods of the research: A group of 431 women with terminated pregnancy due to anemia (n=246) and CP (n=185) was prospectively examined in the first trimester of pregnancy. Written informed consent to participate in the study was obtained from all patients.

Criteria for inclusion in the study: the presence of a history of reproductive losses (up to two months after pregnancy termination).

Research methods: clinical and statistical analysis, sonography, hysteroscopy, pathomorphological examination of the biopsy of the uterine mucosa/removed material with visually obvious pathology and/or revealed by sonography.

Mathematical processing of the data was performed with standard software packages for Windows version 20 (SPSS Inc., Chicago, IL).

Statistical processing of the studied material included descriptive statistics. Criteria $\chi 2$ were used to assess the significance of differences in qualitative features in unrelated groups. Differences between indices in varuous groups were considered significant at $p < 0.05$.

Research results and discussion: Diagnostic evaluation of the endometrium among women with pregnancy termination on the background of CP and anemia was made up of sonography, hysteroscopy and pathomorphology results. Sonographic study contributed to the stigma identification, indicating CE presence, the consolidation of which showed the possibility of selecting different types of inflammation (previously identified in the works that we have studied as hypo - and hyperplastic). Hysteroscopic features of chronic inflammation in the endometrium among women with termination of pregnancy on the background of EGD showed a high incidence of uneven mucosal thickness in a hyperplastic type (80.8% vs. 65.2%) ($p<0.05$). Hyperemia ± vascular mucosal injections were detected in 85.9% among women with the hyperplastic CE type and a quarter of patients had the hypoplastic one ($p<0.05$). Monovariance of signs was established in relation to pallor and thinning of the mucosa (in 76.0% with a hypoplastic CE type), polypoid outgrowths (77.8% – hyperplastic). Mucosal mosaicity was detected twice as often in the hyperplastic variant (40.4% vs. 22.5%) ($p<0.05$).

It is important to compare the diagnostic value of methods used in the assessment of the endometrial condition in order to substantiate the volume of examination of the contingent with pregnancy termination on the background of EGD (table 1).

The effectiveness of diagnosing the hyperplastic type complexly (using both sonography and visualization) was superior to that in the group with the hypo-

Diagnostic informational content of methods for detecting chronic endometritis

Groups	N	Sensitivity	Specificity	Diagnostic accuracy
Sonography				
Hypoplastic CE type	122	79,2	68,6	72,4
Hyperplastic CE type	188	92,6	66,7	78,9
Hysteroscopy				
Hypoplastic CE type	138	89,6	74,4	79,8
Hyperplastic CE type	198	97,5	77,2	86,7

plastic CE variant – for all analyzed constants.

Detailed endometrial histological studies in a group of women with early reproductive losses on the background of EGD showed the presence of endometrial polyps – 5.5%, intrauterine synechiae – 2.0%, unchanged mucosa – 9.3% (figure 1).

Pathological examination of endometrium in the sample with termination of pregnancy on the background of EGD proved that the combination of CE histostigmas was revealed in 83.5%, with a greater frequency of hypoplastic variants in CP (50.3% vs. 24.8% with anemia) (p <0.05) and the presence of the hyperplastic one – in half of the samples with anemia – in one and a half times more often (p <0.05). “Incomplete” morphological CE confirmation was determined in 39.2%.

Fibrosis of stroma and blood vessels was determined three times more often in the group with CP (83,2% versus 27.2%) (p<0.05). Infiltration of the endometrium by lymphocytes as a part of diagnosing chronic inflammation of the uterus was detected in 83.2% of mucosal biopsy specimens, diffuse “lesion” – one and a half times more often with anemia (p <0.05), follicular clusters – twice more often – with CP (p <0 , 05).

The discrepancy between the endometrial thickness and the MC phase on the background of chronic inflammation features was determined in 63.8% of the samples. Signs of productive inflammation in the interval of two months after pregnancy termination were found among 28.8% of women with EGD.

Women with the hypoplastic CE type were distinguished by the predominant presence of focal endometrial infiltration by lymphocytes – 4.6 times more often (72.1% vs. 15.8%) (p<0.05) along with dystrophic/atrophic endometrial transformation – with the same frequency (73.4%).

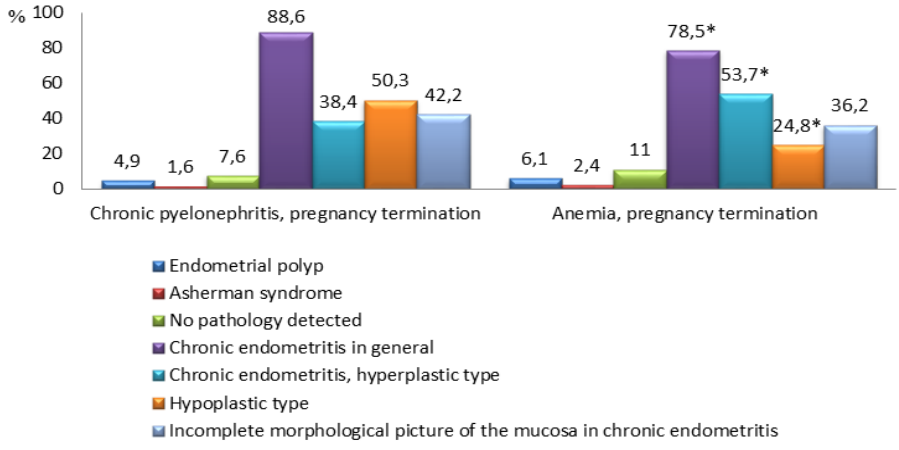

Fig. 1. Morphological characteristics of the endometrium in groups with EGD and pregnancy termination
Note: * (p <0.05) - differences are statistically significant between groups

Pathomorphological features revealed in the course of complex endometrial examination of women with CP and anemia have shown the possibility of reproductive losses prevention up to 83.5% by CE hypodiagnostics.

According to the data obtained, different effectiveness of evaluation methods of endometrial conditions among women with pregnancy termination on the background of CP and anemia shows their complementarity within the framework of distinguishing CE types which present the cause of reproductive losses in the early stages [7, 14].

Similar conclusions lead to the statement that improvement of women’s reproductive health is achieved by optimizing the diagnosis and the treatment of chronic inflammatory diseases of the pelvic organs [6].

The interrelation between the lack of pregravid preparation on the background of chronic EGD and high CE frequency is obvious. Their diagnosing and treatment on the pre-gestational stage seem to be the optimal prevention tactics of various violations of the “fetal-endometrial” interaction.

Thus, clarification of the concepts of CE pathogenesis in hypo- and hyperplastic types during a comprehensive study of women with abortion on the EGD background will allow for differentiated management tactics, involving a set of measures to restore the structural and functional viability of the uterine mucosa.

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ESTIMATION OF ANTIULCEROUS EFFECT OF MULTICOMPONENT PLANT EXTRACT IN EXPERIMENT

DOI 10.25789/YMJ.2019.65.14

ABSTRACT

The aim of the work was to estimate the antiulcerous effect of a new multicomponent plant extract derived from the following species of medicinal plant materials: leaves of *Plantago major* L., grass of *Gnaphalium uliginosum* L., rhizomes and roots of a *Inula helenium* L., flowers of *Matricaria chamomilla* L., roots of *Glycyrrhiza glabra* L., grass of *Polygonum aviculare* L., grass of *Urtica dioica* L., fruits of *Sorbus aucuparia* L.in the ratio 3:3:3:2:2:1:1:1. Standardization of the extract was carried out in terms of flavonoids. There was used the Pauls index (PI), the index of antiulcerous effect (AE) and morphological evaluation of the gastric mucosa. In experiments on *Wistar* line rats with butadion-induced injury of the stomach mucosa the marked antiulcerous activity of the multicomponent plant extract in a dose of 150 mg/kg has been established. The administration of the extract restricted the formation of ulcer defects which were more marked on the 14th and 21st days of observation. Such morphological features of activation of regenerative processes against the background of introduction of the given remedies as the new growth of vessels, cleanliness of the wound, inhibition of inflammatory reaction and active granulation were more expressed in rats treated with the extract and less distinct in rats treated with the preparations of comparison. The findings of the research confirm the expressed antiulcerous effect of the plant extract which is comparable to the effects of befunginum and ranitidine. The complex of biologically active substances contained in the extract promotes the acceleration of the ulcer healing due to its versatile influence on the main pathogenesis mechanisms of the given pathology. The findings of the research have shown that the tested extract has good prospects for creation of medicinal preparations for prophylaxis and treatment of gastric ulcer.

Keywords: multicomponent plant extract, model of the butadion-induced ulcer, antiulcerous effect.

Introduction. On abundance, weight of a current, complications and mortality the stomach ulcer occupies one of the leading places among diseases of the digestive system [7, 8]. In a disease pathogenesis the main role is assigned to balance upset between factors of aggression and protection of a mucosa of a stomach and duodenum against the background of change of a neuroendocrine and immune regulation of a gastroduodenal zone [4, 9, 11].

The market of medicinal preparations with the proved antiulcerous activity exceeds 500 names, at the same time the problem of effective therapy is far from the permission. At treatment antiulcerous tools observe development of aggravations and emergence of a recurrence in 30-80% of cases, the complicated stomach ulcer forms meet at 25-45% of patients, the resistance of gastroduodenal ulcers to pharmacotherapeutic influence meets at 15-25% of patients, the side reactions at reception of a number of medicines are observed at one third of patients. Therefore relevant is a problem of development of the effective, not having the side effect gastroprotectiv tools [3, 6, 10].

In this regard, the purpose of our research was determination of antiulcerous activity of new complex plant extract.

Materials and research methods. As object of researches served extract dry, received from the following types of vegetable raw materials: leaves of *Plantago major* L. (3 h), grass of *Gnaphalium uliginosum* L. (3 h), rhizomes and roots *Inula helenium* L. (3 h), flowers of *Matricaria chamomilla* L. (2 h), roots *Glycyrrhiza glabra* L. (2 h), grass of *Polygonum aviculare* L. (1 h), leaves of *Urtica dioica* L. (1 h), fruits of *Sorbus aucuparia* L. (1 h). The received extract contains carotenoids,