Contraceptive efficiency and not contraceptive advantages of a continuous regimen of reception of the combined oral contraceptives at women with iron deficiency anemia

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Контрацептивная эффективность и неконтрацептивные преимущества непрерывного режима приема КОК у женщин с железодефицитной анемией

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Abstract: *pregnancy and abortion are the most significant risks for health that women face at reproductive age. The huge role in conservation of reproductive health is played by the choice of a method of contraception which allows to regulate birth rate, mainly by the prevention of undesirable pregnancy.*
Аннотация: *беременность и прерывание беременности являются наиболее значительным риском для здоровья, с которым женщины сталкиваются в репродуктивном возрасте. Огромную роль в сохранении репродуктивного здоровья играет выбор метода контрацепции, который позволяет регулировать рождаемость, главным образом путем предупреждения нежелательной беременности.*

Keywords: *reproductive health, COC, menstrual cycle, iron deficiency anemia, pregnancy.*
Ключевые слова: *репродуктивное здоровье, КОК, менструальный цикл, железодефицитная анемия, беременность.*

Nowadays more than 200 million women prevent unwanted pregnancy by means of the combined oral contraceptives (COC) [1, p. 229-234]. At present, hormonal contraception is not only the way of conservation of reproductive health of the woman, but also prophylactic and treatment of a series of diseases. Despite the increased standards of living, the iron deficiency anemia (IDA) continues to take the leading position in structure of a case rate not only in Uzbekistan, but also around the world. According to WHO,1,987,300,000 inhabitants of the planet suffer from anemia, that is one of the commonspread, if not the major, group of illnesses [1, 2, p. 1311-1319].

Due to stated, the purpose of the given research is to define contraceptive and not contraceptive advantages of the use of continuous regimen of the COC for women with an iron deficiency anemia. In solutions of an effective objective, 50 women of reproductive age with the established diagnosis of a chronic iron deficiency anemia, have been given the Mikroginon for the purpose of contraception (30 mkg of ethenyloestradiolum and 150 mkg of a dezogestrel) in the prolonged regimen - 63 days of reception of active medication, with the subsequent 7 day break within one year. Prior to the beginning and in the course of the research all patients have been examined and had no contraindications for reception of the COC.

200 prolonged menstrual cycles were analysed against the background of Mikroginon's reception. Cases of pregnancy of patients during the medication are not registered. Thus, the contraceptive effect of this method made 100%. The general condition of patients remained satisfactory throughout the entire period of observation, although collateral reactions were noted. Characterizing the acceptability of hormonal contraception in the prolonged regimen, it is necessary to notice that the collateral reactions (table 1) arising during the reception of the COC were shown in most cases in the first 1-3 months of reception of the COC (the adaptation period) and had an accurate tendency to depression after the 3rd month of use of a contraceptive.

Table 1. Frequency of emergence of collateral reactions at women of the I group (n=50)

Nature of collateral reactions	**Observation period**		
	3 months	**6 months**	**12 months**
Nausea	5(10%)	-	-
Edemas	4 (8%)	-	-
Headache	2 (4%)	1 (2%)	-
Roughening of mammary gland	7 (14%)	1 (2%)	
Intermenstrual bloody allocations	15 (30%)	5 (10%)	-
Change of body weight	5 (10%)	1 (2%)	

According to the data given in the table, the most common collateral reactions occured in the form of intermenstrual bloody allocations and roughening of mammary glands. So, if in the first 63-days of cycle of the COC intake, intermenstrual bloody allocations occurred at 30% of patients and continued within 4-5 days (on average 4,4 ± 0,5 days), then in 6 months of reception of Mikroginon they were noted only at 10% of women, and by the end of the first year of observation, none of the patients show similar complaints. At the same time the specified bloody allocations

were scanty, short-term and were not the basis for use of any additional medicaments. Roughening of mammary glands was noted at 14% of patients, generally at the beginning of intake of the COC (1-2 weeks). Analyzing data of dynamic control of arterial pressure, we did not find statistically reliable differences from basic data (p> 0.05) (table 2).

Table 2. Indicators of AP against the background of use of Microginon in the I group

Indicators	Before the reception	After 1 month	After 3 months	After 6 months	After 12 months
AP- systolic (mm of a mercurial column)	113,08±4,47	112,56±5,05	113,59±4,07	112,05±3,88	112,31±4,21
AP-diastolic (mm of a mercurial column)	73,33±4,43	70,90±8,39	72,31±3,55	72,31±4,21	72,56±4,79

The body weight augmentation (no more than 2 kg) was recorded only at 5 (10%) patients after 3 months of using Mikroginon, on the 6th month only at 1 (2%). While the conciderable number of the patients earlier have noted with body weight augmentation on the eve of and during a menses, noted stabilization of weight throughout the prolonged reception cycle. To the patients showing complaints to body weight augmentation against the background of Mikroginon's intake, were given recommendations on a balanced diet and physical activities. In most cases such by-effects as nausea, a headache, a roughening of mammary glands, intermenstrual bloody allocations and bleedings of abscesses disappeared independently and did not demand additional treatment.

Menstrual reaction

All patients filled "An individual menstrual calendar" during the research in which they noted: duration of bloody allocations (depending on approach time: menstrual or intermenstrual), and also hemorrhage volume. For assessment of volume of a hemorrhage "the Visual scheme of assessment of blood losses" was used (J. R. Yassen, 2001). All patients of the I group were regularly noted with reaction similar to the menstrual occuring in a 7-day break off the COC intake, the amenorrhea didn't come in any case. Giperpolimenorrey was taped at 10 (20%) women. For the purpose of objectification of complaints the visual method of assessment of blood losses developed by Janssen J.R. was used. Women filled in the special visual table, with calculation of quantity of the used hygienic agents, in various days of a menses, then the total of points according to extent of blotting of sanitary material was counted. The number of points 185 and above was diagnostic criterion of a menorrhagia.

Table 3. Duration and volume of bloody allocations at patients of the I group

Interval of observations	Duration of bloody allocations (days)	Volume of bloody allocations (points)
Initially	7,2±0,4	195±12,6
3 months	5,8±0,5	179±11,7
6 months	5,4±0,3	138±l,l
12 months	3,0±0,2	122±7,4

According to the submitted table, by the end of the 3rd month of use of Mikroginon according to the prolonged scheme, the number of days of bloody allocations averaged 5,8±0,5, despite recorded at 29 (38,7%) patients of the I group intermenstrual bloody allocations. The research revealed the positive influence of reception of Mikroginon on the menorrhagia phenomena at patients of the I group, that was expressed by considerable decrease of volume of a menstrual blood loss owing to what the frequency of occurrence of a hyper polymenorrhea reduced by 12% after 6 months from the beginning of the period of observation. By the end of the period of observation the cases of a gipermolimenorea was not registered. Estimating the total amount of a hemorrhage at patients of the I group, we should note its steady decrease throughout the entire period of observations in the absence of cases of emergence of an amenorrhea.

Influence of the prolonged regimen of reception of Mikroginon on the diseases bound to a menstrual cycle

During the research we taped therapeutic effect of use of the prolonged scheme for patients with symptoms of primary dysmenorrhea, a premenstrual syndrome and a hyper polymenorrhea. Most of the women who entered into the I group showed complaints to morbid feelings during a menses, symptoms of a premenstrual syndrome (PMS) and a plentiful menses.

Reception influence the COC on symptoms of a premenstrual syndrome at patients of the I group

Symptoms of a premenstrual syndrome such as irritability, abdominal distention, delicacy, fatigue, working capacity depression, deterioration in the general state and edemas of the lower extremities, etc., appearing in 5-10 days prior to an estimated menses, are taped at 22 (44%) patients.

Table 4. Dynamics of symptoms of PMS at patients of the I group

	Psycho - neurotic symptoms of PMS (irritability, tearfulness, aggression)	Vegeto-vascular disturbances (giddiness, nausea, headache)	Metabolic and endocrine disturbances (roughening of a mammary gland)
Initially	13(59%)	5(22,8%)	4(18,2%)

3 months	10(45,5%)	3(13,6%)	1(4,5%)
6 months	7(31%)	2(9%)	-
12 months	3(13,3%)	-	-

According to the figures from the submitted table, during the research the data confirming efficiency of purpose of drug at patients with PMS symptoms were obtained: conciderable reduction of frequency of implications of the majority of symptoms to the extremity of the 1st cycle of administration of drug were noted.

Efficiency of influence on various symptoms of PMS fluctuated from 41%-46%, before total disappearance of such symptoms as giddiness, a headache, a meteorism, edemas.

Influence of a continuous regimen of reception the COC on severity of primary dysmenorrhea at patients of the I group

Morbid menses (primary dysmenorrhea) are noted at 13 (26%). During the research data on bystry and effective influence the COC on symptoms of primary dysmenorrhea at patients which was expressed in appreciable depression of both the occurrence frequency, and severity of symptoms were obtained. To the extremity of the second cycle of administration of drug at one patient symptoms of primary dysmenorrhea aren't taped.

Conclusion

During the use of the oral combined hormonal contraceptive of Mikroginon at 50 patients with IDA, there was not taped any cases of pregnancy. Its acceptability was defined by a small number (18%) of collateral reactions, typical for the COC (a mastodynia, nausea, etc.) which arose mainly in the first cycle of reception (the adaptation period) and disappeared further practically at all patients. Reception of the COC at patients of the I group did not exert impact on indicators of arterial pressure and IMT. Intermenstrual bloody allocations, characteristic of the prolonged use, which arose at 29 (38,7%) patients did not reduce satisfaction with method and caused drug withdrawal only at one woman. The obtained data confirming efficiency of the prolonged appointment regimen of the COC at women with primary dysmenorrhea and symptoms of PMS as on influence on vegeto-vascular, and psycho - neurotic disturbances. Comparison of data on duration and volume of menstrual bloody allocations on cancellation of the prolonged reception regimen of the COC showed their decrease at all patients, but to a large extent it concerns to the women suffering from a menorrhagia. By the termination of 1-2 cycles of the prolonged reception, none of the patient was diagnosed menorrhagia.

Thus, results of our research testify the high contraceptive efficiency and positive not contraceptive effects of prescription of the prolonged COC regimen at the diseases bound to a menstrual cycle, the transitional nature of side effects. Influence of this reception regimen of the COC on the course of IDA will be considered further.

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