

MEDICAL SCIENCES

FEATURES OF THE PRE-PREGNANCY PERIOD IN WOMEN WITH URTICARIA, WHICH OFTEN RECUR

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ABSTRACT

The article presents materials on the etiology, pathogenesis, clinical manifestations of chronic recurrent urticaria in women undergoing a program of pre-pregnancy training [15]. Generalized clinical observations to optimize pregnancy planning and treatment. Quality of life indicators were assessed using a questionnaire [13].

An initial examination was performed 3 months before the planned pregnancy - anamnesis taking, inspection, physical examination. Patients were examined the gastrointestinal tract: fibrogastroduodenoscopy with *Helicobacter pylori*. 23 patients were treated, 1 of whom did not complete the course of treatment due to spontaneous pregnancy.

According to epidemiological statistical studies, there is an increase in cases of allergies. The indicators range within 30% among the country's population.

Treatment during pregnancy is a difficult task. The pharmacological effects of drugs on the mother and fetus may be unpredictable. These drugs can lead to delayed adverse effects on the embryo [9.10.12]

During pregnancy the function of the cellular immune system decreases, which leads to an increase in the number of T-suppressors. This effect last from 8 weeks to 32 weeks of pregnancy. From an immunological point of view, pregnancy is a condition characterized by physiological immunosuppression that provides implantation and childbearing [5.6.9].

The task of planning a pregnancy of a woman with chronic recurrent urticaria is to correct health disorders [2.4].

Patients with chronic recurrent urticaria have a reduced quality of life and efficiency. All this leaves an imprint on socioeconomic and psychological self-esteem of women [11].

Experts in many countries are studying methods to control the symptoms of the disease [17]. The combination of different antihistamines in therapy, including montelukast, omalizumab, cyclosporine, does not bring the desired effect [6].

Due to the polyetiology of chronic recurrent urticaria, it is desirable to minimize the using of drugs that can provoke recurrence [18]. For women, in order to prevent folic acid deficiency, is recommended a balanced diet [3,5]. Appointment of folic acid at a dose of 400-800 mcg/day, to prevent malformations and complications of pregnancy in women at risk [7.8.].

Keywords: Chronic recurrent urticaria, omalizumab, IgE, intrauterine growth retardation, miscarriage, distress syndrome.

The aim of the study: to study the effectiveness of omalizumab in patients with chronic recurrent urticaria during pregnancy planning, and to ensure the maximum prolonged and relapse-free course due to the negative effects of antihistamines during pregnancy and intrauterine state of the fetus.

Materials and methods: 23 women aged 18 to 40 years were involved in the study. The average duration of the disease is 3 +/- 7 years.

The intensity of clinical symptoms was determined by the UAS 7 scale:

- 0 - no symptoms
- 1 - mild symptoms
- 2 - pronounced symptoms
- 3 - sharply expressed symptoms

Skindex-29 was also used – a questionnaire to assess the quality of life. This questionnaire includes 29 questions and has three sections:

- 1) symptoms
- 2) emotions

3) functions.

Physical symptoms are soreness, itching, burning, skin irritation, sensitivity.

The emotional sphere is concern about the condition of the skin, feelings of depression and shame, concern that the skin disease will leave scars, feelings of deterioration of the skin, anxiety, embarrassment, feelings of humiliation, annoying about the condition of the skin, self-rejection.

Functions – this quality of sleep, work and hobbies, social activity, sexual life, loneliness, fatigue, reluctance to leave home, limiting intimacy with other people, difficulty in implementing daily activities, difficulty in expressing feelings, an obstacle to establishing relationships with others, limiting closeness.

The answers were evaluated on a conditional 5-point scale. The scores fit to the patient's condition at the time of responding and correspond to:

- 1) 0 - never
- 2) 25 - rarely

- 3) 50 - sometimes
- 4) 75 - often
- 5) 100 – forever

The psychological quality of life of patients is lower the higher the number of points. The overall score for the sections was calculated as the arithmetic mean by the number of questions.

Patients which course of pregnancy occurred against the background of exacerbation of chronic recurrent urticaria, are at risk for delayed fetal development, miscarriage, distress syndrome.

Despite the fact that there are currently a large number of antihistamines, their use during gestation is limited, and in some cases contraindicated [14]. This has led to the first priority measures to prevent chronic recurrent urticaria, which should be prescribed at the stage of pre-pregnancy training (detection and treatment). Women who received treatment and adherence to the regime had no cases of exacerbation of chronic recurrent urticaria, and in those cases when they occurred, they had a mild course.

All patients underwent examination of the gastrointestinal tract: fibrogastroduodenoscopy with determination of Helicobacter pylori, ultrasound diagnosis of the abdominal cavity and pelvis, bacterioscopic examination PAP test.

All patients, before the prescribed treatment, were examined to determine the level of IgE in the blood serum by solid phase enzyme linked immunosorbent assay on DRG test systems (Germany) using anti-IgE serum. Statistical processing was performed using the software product Statisticav.6.1. ® (StatSoft, USA) serial number AGAR 909E415822 FA. The averages are

presented in the form of the arithmetic mean and its error (M +/- m) or median and interquarter range Me (25-75 percentile). Significance of differences among them was assessed by Student's criterion for dependent samples, Pearson X2 with Yates's correction. The critical level of statistical significance of differences (p) was taken <0.05 [1].

Results and discussion

Among these patients was found pronounced symptoms before treatment: generalized urticarial rash (average intensity - 3.0 points) with expressed itching (average 2.9 points) with a significant deterioration in quality of life (Skindeks - 29: 43.4 + \ - 4.2). The level of total IgE from 23 IU / ml to 1880 IU / ml, median 200 (79-714 IU / ml).

During the exacerbation of the disease before the appointment of the study drug, omalizumab at a dose of 150 mg, patients received H1-blockers of the latest generation in a standard dose. In women who had no effect, the dose of the latest generation of H1-blockers was increased fourfold. The effect of a fourfold dose appeared on the third day of reception, and when returning to the standard dose, urticaria and pruritus reappeared. Omalizumab 150 mg was prescribed in accordance with European guidelines for the diagnosis and treatment of chronic recurrent urticaria. A clinical and therapeutic effect received in 72 hours after reception.

Dynamics of rash intensity from omalizumab: after the first injection, the rash disappeared in five patients, after the second injection in half of the patients, and after the third - residual effects in four patients.

Table 1.

Dynamics of the intensity of the rash under the influence of omalizumab (M ± m)

Indicator	Observation period			
	Before treatment	After 1st injection	After 2nd injection	After 3rd injection
Number of patients with symptoms, n /%	23/100	18/78	13/57*	4/17**
The average score of symptoms M ± m	2,9±0,1	1,7±0,2**	0,7±0,2**	0,3 ±0,2**

Notes: * - p <0,05; ** - p <0.001 compared to the initial state.

Dynamics of pruritus intensity under the influence of omalizumab: after the first injection - reduction of pruritus intensity from 3 points to 1.6 +/- 0.2 points and

complete disappearance of pruritus in half of patients after the second injection.

Table 2.

Dynamics of the intensity of pruritus under the influence of omalizumab (M ± m)

Indicator	Observation period			
	Before treatment	After 1st injection	After 2nd injection	After 3rd injection
Number of patients with symptoms, n /%	23/100	18/78	13/57*	3/13**
The average score of symptoms M ± m	2,9±0,1	1,7±0,2**	0,7±0,2**	0,2 ±0,1**

Notes: * - p <0,05; ** - p <0.001 compared to the initial state.

There was no statistically significant correlation between total IgE levels and the dynamics of clinical symptoms under the influence of omalizumab at a dose of 150 mg in patients with chronic recurrent urticaria.

The safety and effectiveness of this treatment are confirmed by the effectiveness of repeated courses of omalizumab in patients with recurrent urticaria.

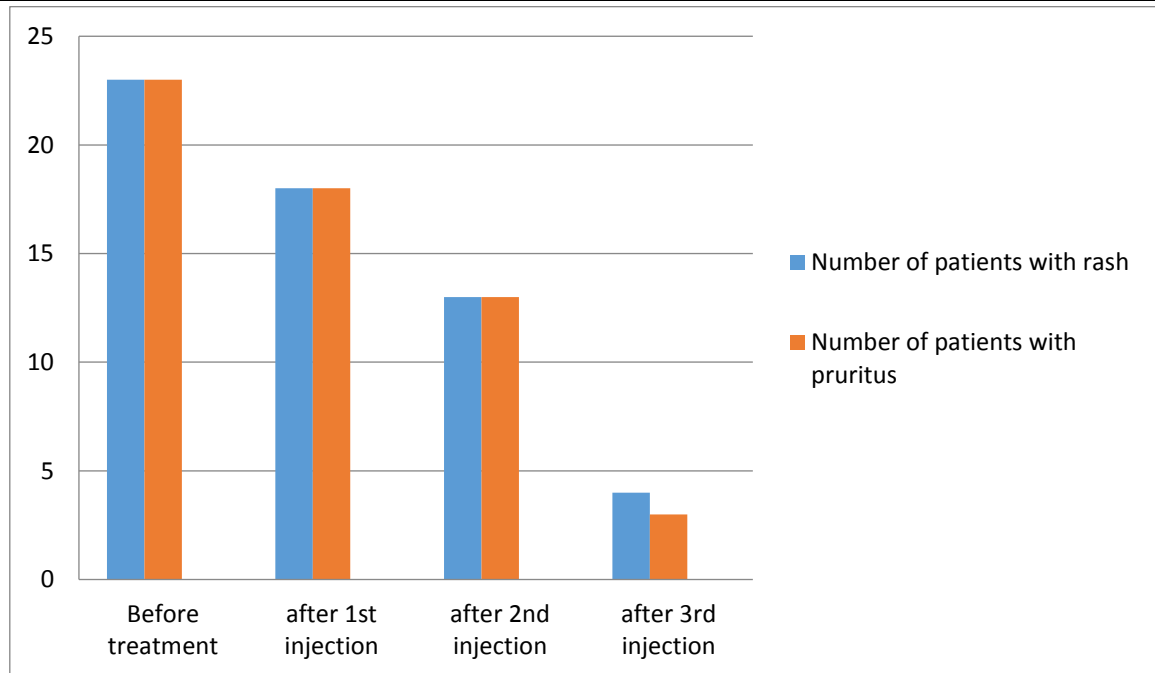


Table 3. The dynamics of the severity of rash and pruritus in patients with chronic urticaria under the influence of omalizumab

Conclusion:

1) Pre-collected allergy anamnesis to detect allergy pathology or rather chronic recurrent urticaria, which impairs women's quality of life by 45%, during pregnancy planning will help avoid a rash before the desired pregnancy.

2) Properly selected and timely treatment (Omalizumab, 150 mg.) relieves symptoms of chronic recurrent urticaria. Based on the mentioned materials, we can say that to reduce the risk of perinatal loss and perinatal morbidity requires timely detection of women with chronic recurrent urticaria and the use of treatment and prevention methods, namely the use of omalizumab during pregnancy planning, which had the most prolonged and relapse-free course period of pregnancy and in the postpartum period, which provided the possibility of long-term breastfeeding.

3) Relieving symptoms significantly improves a woman's psychological state of health, it also has a positive effect on the course of the disease, in which chronic recurrent urticaria requires the appointment of H1-blockers, which are not always allowed during pregnancy.

4) Women who are planning a pregnancy and have a history of chronic recurrent urticaria should be monitored by an allergist and gynecologist.

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