

добиться значительно большего успеха как в карьере, так и в личной жизни. В связи с этим рубцы постакне, которые порой уродуют внешний вид, беспокоят людей не меньше, чем активные проявления акне. Они сложно поддаются корректировке, значительно снижая качество жизни, и требуют дорогостоящего продолжительного лечения.^{[4][5]} Поэтому очень важно уметь грамотно лечить акне и не допускать развития постакне в будущем.

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«UNIDOX-SOLUTAB» IN LOW DOSES IN THE TREATMENT OF ROSACEA»

Summary. A low dose of doxycycline (50 mg per day) has the same efficacy as a standard dose of 200 mg per day; a low dose of doxycycline (50 mg per day) provided almost the same level of remission in rosacea patients after 10 days of therapy.

Key words: doxycycline, rosacea, remission, low doses, therapy, erythema, patient

Introduction. *Rosacea* – a chronic inflammatory disease with a predominant lesion of the facial skin. It is characterized by the appearance of telangiectases, papules and pustules [1]. Rosacea is most common in women over 30 years of age, with the exception of the phymatous form, which is more common in men.

The pathogenesis of rosacea are based on changes in the tone of the skin's superficial arterioles, which are caused by various factors [2].

Exogenous factors: physical factors (sun exposure, exposure to heat, cold, frequent chemical peels); alimentary factors (alcohol, hot drinks, spices).

Endogenous factors: pathology of the digestive tract (diseases associated with *Helicobacter pylori*); activity of *Demodex* (*D. brevis* and *D. folliculorum*) mites [3]; infectious skin diseases; endocrine system pathology; changes in the body's immune status; the influence of the components of blood coagulation and kallikrein-kinin systems on blood vessels.

Clinically, there are several forms of rosacea [4]:

- erythematotelangiectatic (the most common type, characterized by dilated blood vessels, redness and inflammation),
- papulopustular (acne on the face, which can cause swelling and the formation of pustules with white heads),
- phymatous (thickening of the skin, sometimes on the nose. Some people with this type of rosacea may also develop rhinophyma. This is very rare - usually occurs in men over the age of 60)
- ophthalmic rosacea, ocular rosacea (the area around the eyes becomes inflamed).

The aim of the study was to study the efficacy and safety of low doses of doxycycline (Unidox Solutab®) in the treatment of patients with rosacea

Rosacea therapy depends on the form of the disease. Since the pathogenesis of rosacea is based on inflammatory processes, antibiotics are the drugs of choice for severe and moderate forms. Doxycycline is one of the most commonly used drugs for the treatment of rosacea. it is the drug of choice for acne and rosacea, because it is able to suppress metalloproteinases, inhibit cytokines and inflammatory cell proliferation, phospholipase A2. Doxycycline can inhibit granuloma formation and inhibit angiogenesis, which is important in the pathogenesis of rosacea [7].

The search for a reduction in the side effects of the drug and the evidence of its anti-inflammatory activity led to the development of new treatment regimens for this disease. The current trend is the use of low-dose

(anti-inflammatory) doses of doxycycline. A low dose of this drug has no antimicrobial effect, but it has an anti-inflammatory effect necessary to achieve clinical improvement and remission in rosacea.

A novelty in rosacea therapy is the synthesis of a doxycycline capsule containing 40 mg of the drug (30 mg is released immediately, 10 - after some time). It is the only rosacea therapy approved by the FDA [6, 9], that is equally effective as a 100 mg doxycycline capsule.

Materials and methods - 34 patients (18 women, 16 men) with moderate and severe papulopustular rosacea were examined. The average age of the patients was 43.5 ± 12.6 years, and the duration of the disease was 3.5 ± 1.4 years. Among the comorbidities, gastritis was detected in 12 patients (17.9%), cholelithiasis – in 3 patients (4.5%), bronchitis – in 2 patients (2.9%), pyelonephritis – in 5 patients (7.5%). All of them had comorbidities in the stationary stage and did not require additional therapy.

The severity of the disease was assessed using the rosacea severity index. Each of the signs (papules and pustules, erythema, telangiectasia, dryness, itching or burning, eye damage) was evaluated in points: from 0 (no sign) to 3 (strong sign). The maximum score was 21. The index from 1 to 7 points corresponded to a mild degree of rosacea, 8-14 – medium, 15-21 – severe.

Patients were divided into two groups (the first – 18 patients, the second – 16 patients). Patients of the first group received doxycycline (Unidox Solutab®) at a dose of 100 mg 2 times a day for 10 days in accordance with the protocols of treatment of skin diseases of the Kyrgyz Republic. Patients of the second group received Unidox Solutab® 50 mg once a day for 10 days. In both groups, Metrogyl (metronidazole) gel was used as local therapy 2 times a day.

Unidox Solutab® was chosen as the main therapy because it is the only doxycycline drug that is produced in tablets and they can be separated. Taking into account the photosensitizing effect of doxycycline, all patients were recommended to avoid sun exposure and to use sunscreens with a sun protection factor of more than 30. After 10 days, the severity of the disease was evaluated again. Patients of the first group continued to use Metrogyl (Metronidazole) gel externally 2 times a day. Patients of the second group continued to receive Unidox Solutab® at a dose of 50 mg per day until the end of 3 months, in combination with local therapy of Metrogyl (Metronidazole) gel. Patients of both groups were examined again after 4, 8 and 12 weeks.

Results of treatment. Application of Unidox Solutab®

№		100 mg, 2 times/day	50 mg, 1 time/day
1	Number of patients	18 – 53%	16 – 47%
2	Severity		
	Before treatment	13.6 ± 4.7	12.9 ± 4.8
	After 10 days of treatment	3.6 ± 1.9	3.6 ± 1.9
3	After 10 days of treatment		
	Complete remission	5 patients – 27%	4 patients – 25%
	Improvement	12 patients – 67%	11 patients – 69%
4	After 4 weeks of treatment		
	Exacerbation of disease	8 patients – 44%	None
	Remission	5 patients – 28%	7 patients – 44%

5	After 8 weeks of treatment		
	Remission	10 patients – 55%	14 patients – 88%
6	After 12 weeks of treatment		
	Remission	12 patients – 67%	15 patients – 94%
7	Side Effects	4 patients – 22%	None

Side effects when taking Unidox Solutab® were observed in 4 patients: brief episodes of dyspepsia that did not require discontinuation of the drug, vulvovaginal candidiasis, nausea.

The data on the rosacea treatment obtained correspond to the data of foreign authors using similar schemes. Unidox Solutab® in low doses (50 mg once a day) for three months has a persistent effect in the treatment of rosacea. Low doses of doxycycline (50 mg per day) has the same effect as the standard dose of 200 mg per day. Low doses of doxycycline has proven to give almost the same level of remission in rosacea patients after 10 days of therapy. Patients receiving low doses of the drug are less likely to develop adverse reactions compared to those receiving the standard dosage. The need for long-term doxycycline therapy was confirmed by a significantly higher percentage of relapses in patients receiving 10-day short regimens.

An important feature of the drug "Unidox Solutab®" is that the content of doxycycline is in the form of monohydrates, and not hydrochlorides which conventional doxycycline capsules contain. Unidox Solutab® has the highest bioavailability of all drugs in this group (up to 95%), an optimal safety profile and is easy to administer. Unlike doxycycline hydrochloride, doxycycline monohydrate does not irritate the gastrointestinal mucosa and does not cause the development of erosive and ulcerative lesions of the esophagus, which often happens after doxycycline hydrochloride therapy. Unidox Solutab® can be taken with or without food. Unlike tetracycline, it can be prescribed to patients with renal insufficiency.

Conclusions. Thus, long-term use of the drug <<Unidox Solutab®>> in low doses is an alternative in the treatment of rosacea and it allows the achievement of stable remission.

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