

### Azelaic Acid Binding - Treatment of Papulous-Pustulous and Rose Acne

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#### ABSTRACT

Treatment of patients with acne vulgaris and rosacea is a difficult and effective problem of practical health care due to the wideness of the organization in the Republic of Belarus. For its implementation, the objective necessity is the help of medicine.

**Introduction:** Azelaic acid is a naturally occurring straight-chain saturated 9-carboxylic acid dicarboxylic acid. It is an oxidation product of unsaturated dicarboxylic acids, a lipid-related intermediate in the human body, which is produced in small quantities. Azelaic acid is safe for the human body, it is not toxic, it does not have a mutagenic reaction, so feeding and lactation are not contraindications for adding this acid preparation. Azelaic acid is related to the inhibition of mitochondrial activity of antimicrobial cells, it is a co-inhibitor of various oxygen-transferring enzymes, penetrates into inflammatory and neoplastic cells, and exhibits antioxidant activity. Prof. NNPotekayeva (2004) is related. Professor AVSamtsov (1998 ) anticomedogenic effect. Cream containing 20% elaic acid Skinoren, prof. VPFedotova (2006), can be considered as an alternative to topical acne therapy with macrolide antibiotics. The main indications for the use of azelaic acid preparations (20% skinoren cream or 15% skinoren gel) are papular-pustular acne vulgaris and papular-pustular form of rosacea. Transferring the production of the experimental gel base provided by skin biopsies to the hairless mice of the mice, which provided a more effective concentration of azelaic acid and ensured its rapid penetration into the skin. Skinor-gel does not contain alcohol, has a pH of 4.8, is non-toxic, odorless, does not cause photosensitization, has a nutritional effect. Skinoren-gel turned out to be more acceptable than skinoren-cream for the treatment of rosacea, because the gel contains only 15% azelaic acid and the cream contains 20%. Clinical indication of Skinoren-gel in acne vulgaris and rosacea in

many product publications.

**Materials and methods:** increase efficiency azelaic acid preparations in the treatment of papulo-pustular vulgaris and rosacea

Materials and methods: 79 patients (37 men and 42 women) with moderate papular-pustular acne, 40 patients with papular-pustular form, 34 surgeons aged 13 years and **under our conditions.** rosacea (5 men and 35 women) 63 clothes from 22 years. The incidence of acne vulgaris was 16 times over 6 months, and the incidence of rosacea was 11 times over 1 year. Mild severity of papular-pustular acne was diagnosed in 31 patients, moderate - in 48 patients.

All patients with acne vulgaris or rosacea are given topical skinoren treatment. Skinoren cream treated 37 (23 men and 14 women) patients with acne vulgaris and 9 (2 men and 7 women) patients with rosacea. Skinoren gel was applied to 42 patients with papular-pustular acne vulgaris (14 men and 28 women) and 31 patients with rosacea (3 men and 28 women). Skinoren cream or gel was applied with a thin layer twice a day to the affected areas, for 6 to 16 weeks, and 4 to 18 to 20 weeks.

**Results and discussion:** antibiotic therapy was not prescribed for patients with mild acne, treatment with azalic acid preparations (cream - 12, gel - 19 patients) was carried out against the background of daily intake of vitamin-1 tablets. complex of trace elements "Teravit antistress" and 2-3 tablets of 250 mg of methionine each. Patients with moderate acne received general treatment (antibiotics, health care with 10-28 days, syncteral 1-2 tablets per day, teravit) together with skin application. antistress 1 tablet per day, special immunotherapy with the production of purified staphylococcal toxoid was performed on 12 patients). Skinoren as monotherapy for 5-12 weeks in 12 patients with mild rosacea and without demodicosis (gel in 10 patients, ointment in 2 patients). The rest of the patients with rosacea underwent complex treatment: 24 patients received a course of anti-Heliobacter therapy, 14 were diagnosed with demodicosis (treatment according to Demyanovich).

Treatment of patients with papular-acne was evaluated by resolution of seborrheic dermatitis, disappearance of papules and pustules. The disappearance of clinical hyperemia, the disappearance of diseased dryness and disease, and the disappearance of new papules and pustules were evaluated. The absence of peeling on the background of mild hyperemia in the lesions, the absence of new pustules in one irregular papule was in favor of improvement.

In patients with rosacea, the treatment was evaluated by the disappearance of erythema, papules and pustules (clinical healing, improvement, improvement, lack of effect). Due to the fact that Skinoren gel, according to the literature, has little effect on the elimination of telangiectasias, this indicator has been determined in the implementation of skin treatment.

In patients with papular-pustular acne with a mild severity of the disease, monotherapy treatment with azelaic acid drugs helps complete remission of acne in 19 (63.3%) patients by the end, which is a noticeable improvement. 9 (30.0%) patients maintained, 2 patients and 1 patient had no effect and he underwent general treatment with the use of Acne BP 5 emulsion. Out of 48 patients with moderate acne, the complex by month of treatment, clinical remission was noted in 7, improvement in 24, improvement in 15, improvement for a while in 2. By the end of the month of treatment, complete remission of acne was noted in 35 patients, improvement was noted in 9 patients. Episodic new papular or papular-pustular products appeared against the background of clinical improvement in 4 patients.

Monotherapy rosacea skinoren gel (10 patients) for 8-12 weeks led to clinical disease in 7 patients, improvement in 2 patients, and improvement in 1 patient. With the treatment of patients with rosacea, by the end of the disease itself, clinical improvement was achieved in 15 patients and comprehensive improvement was achieved in 8, i.e. a high clinical effect was achieved in

82.1% of patients (in the second week, 13 patients treated only skin, 14 patients treated demodicosis after the treatment method). By the end of the 16th week, 4 patients had a residual effect of rosacea, and 1 patient was cured.

**Conclusions:** In acne vulgaris patients, 12 out of 37 patients experienced a mild burning sensation and increased redness of the face during the first days of skin cream application, and 7 out of 42 rosacea patients experienced skin gel application. - 6 patients, often after cream. The composition of the patients arranged a well-tolerated wall. skinoren gel and cream.

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