

Report on results of clinical study of “Losterin” cream effectiveness, safety and compliance among the patients with different dermatosis

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A necessity for a long-term external therapy of chronic dermatosis, and patients' fear of usage of glucocorticosteroids make it highly required to search for non-hormonal external medications with anti-inflammatory, reducing and moisturizing effect. However, the large specter of ready pharmaceutical and cosmetic medications and pastes do not offer native medications, containing such classical dermatic components as naphtalan, urea, salicylic acid in a required concentration. Available foreign analogs contain a small percentage of active substances in its composition, and have a high price, which makes it inaccessible for mass usage. Technical difficulties, time-taking manual process of making prescription medications are inconvenient for patients, as well as for doctors. All of that led to development and application of a domestic “Losterin” cream, which contains such active components as urea, naphtalan, salicylic acid. “Lorestin” cream does not contain glucocorticosteroid hormones, coloring agents, fragrances.

Main active components of “Losterin” cream

Resin free naphtalan is a natural naphtalan, purified from resinous materials, with an intense anti-inflammatory, anesthetic, vasodilating, desensitise and antibacterial action, improves microcirculation, increases intensity of metabolism and stimulates skin trophic functions.

Urea (10%) (Carbamide/Urea) is an effective skin moisturizing substance. It penetrates into skin deep layers easily and serves as a conductor for other active components. It possesses cheratolic, wound-healing and bacteriostatic actions.

Salicylic acid is an active component of willow bark. It possesses anti-inflammatory, antiseptic, wound-healing and cheratolic effect.

D-panthenol stimulates skin and mucous coats regeneration, normalizes cell metabolism, accelerates mitosis and increases collagen fibers endurance, has regenerating and anti-inflammatory action.

Japanese pagoda tree extract contains a complex of alcaloids and flavonoids, including rutin, which has a very strong anti-inflammatory effect, an ability to thicken vessels walls and reduce

its fragility. Japanese pagoda tree's alkaloids are able to suppress keratinocytes proliferation, reducing skin exfoliation.

Japanese pagoda tree medications are used for tumoral and purulent inflammation processes (wounds, burns, trophic ulcers), also for seborrhea, psoriasis, skin fungous diseases, eczema, lupus, furuncles and skin trophic ulcers.

“Losterin” cream application among patients with different dermatosis

Study goal: evaluation of “Losterin” medication's effectiveness, safety and compliance among the patients with different dermatosis.

Study structure: patients of age from 2 to 82 took part in the study, regardless of their age and disease duration. Dermatological diagnosis was provided after dermatovenerologist consultation. “Losterin” cream was used as a monotherapy, and as a part of complex therapy for patients with psoriasis (n = 8), atopic dermatitis (n = 6), eczema (n = 6), seborrhea dermatitis (n = 6). Patients were examined by a highly qualified dermatovenerologist, evaluation of skin conditions (erythema, exfoliation, infiltration, pruritus) and compliance, was held between a doctor and a patient before the therapy and once every 10-14 days during the whole time of treatment.

“Losterin” cream was applied to affected areas by patients independently and/or with a help of medical staff twice within 24 hours for 28 days.

Inclusion criteria:

- 1) non-infectious dermatosis (psoriasis, atopic dermatitis, eczema, seborrhea dermatitis, xerosis, contact dermatitis);
- 2) patient's consent

Exclusion criteria:

- 1) history of allergy to medication components
- 2) bacterial or virus secondary infection, fungus infection
- 3) affected area localization on face or genitals
- 4) erosive, oozing areas

Study method: During the first visit a dermatovenerologist and a patient examined the patient and evaluated skin's conditions (erythema, exfoliation, infiltration, pruritus) and affected areas. During repeating visits there was an additional evaluation of compliance, side effects and allergic reactions by a patient and dermatovenerologist.

Results

1 We had 8 patients under our surveillance, aged from 23 to 72, with an average age of 61. Disease duration was from 5 to 47 years, being average in a group of 21 years. “Losterin” cream was used as a mono, and as a part of a complex therapy. In general, exfoliation, exudative processes and itching reduced by 5-8 day of treatment; hyperemia crown around papule disappeared at 10-14 day. Voronov's pseudoatrophic rim became visible on 20-22 day, as well ad elements infiltration was noted. There were no allergic reactions and side effects. Doctor and a patient evaluated medication's compliance as a good one.

2. We had 6 patients with atopic dermatitis under our surveillance, including 4 children with an average age of 18. Disease duration was from 2 to 21 years, being average of 11 years. "Losterin" cream was used as a mono, and as a part of a complex therapy. All the patients noted the following results: reduction of exfoliation, itching took place on 5-6 day of the treatment, erythema reduction took place on day 7-10, papule elements and lichenification – on day 20. There were no allergic reactions and side effects. Doctor and a patient evaluated medication's compliance as a good one.

3. We had 6 patients with eczema under our surveillance, aged from 22 to 74, with an average age of 53,6. Disease duration was from 1 to 14 years, being average of 6 years. "Losterin" cream was used as a mono, and as a part of a complex therapy. All patients noted the most severe symptoms dynamics during the first week of treatment, such as significant erythema, exfoliation and itching decrease. Infiltration decreased on 10-14 day; complete eruption regress was noted on 20-22 day. There were no allergic reactions and side effects. Doctor and a patient evaluated medication's compliance as a good one.

4. We had 6 patients with seborrhea dermatitis under our surveillance, aged from 19 to 60, with an average age of the group – 35 years old. Disease duration was from 2 months to 12 years, being average of 4,6 years. "Losterin" cream was used as a mono, and as a part of a complex therapy. All patients with seborrhea dermatitis noted reduction of erythema, exfoliation and itching on 7 – 10 day, reduction of infiltration – on 14 – 20 day of the therapy. There were no allergic reactions and side effects. Doctor and a patient evaluated medication's compliance as a good one, however the usage of cream on scalp affected areas required daily shampooing of hair.

5. We had 6 patients with xerosis under our surveillance, aged from 49 to 61, with an average age of the group – 52 years old. Disease duration was 8 years. "Losterin" cream was used as a mono therapy. In general the group noted reduction of erythema, exfoliation and itching on 5 – 7 day, clinical visualization of affected skin regressed by 16-22 day. There were no allergic reactions and side effects. Doctor and a patient evaluated medication's compliance as a good one.

6. We had 6 patients with contact dermatitis under our surveillance, aged from 20 to 82, with an average age of 52. Disease duration was from 1 to 7 days, being average of 3,3 days. "Losterin" cream was used as a mono, and as a part of a complex therapy. All patients noted reduction of erythema and itching on 3 – 5 day of cream application, reduction of infiltration – on 5-7 day, eruptions regressed completely on 10 – 14 day. There were no allergic reactions and side effects. Doctor and a patient evaluated medication's compliance as a good one among 4 (66%) of patients, however 2 patients (34%) noted erythema area growth and its intensity, the appearance of burning feeling on affected area during first two 24 hours of medication application. These conditions disappeared within 2-3 days, without the cancelation of medication usage or any other additional therapy.

Conclusion

Thus, "Losterin" cream application proved to be effective and safe for the patients with psoriasis, atopic dermatitis, eczema and seborrhea dermatitis. There were no allergic reactions and side effects. Cream application on scalp requires hair daily shampooing, which lowers medication compliancy. "Losterin" cream usage in severe stage of contact dermatitis may lead to exacerbation of affected skin.