

THERAPEUTIC EFFECTIVENESS OF OINTMENTS PREPARED ON THE BASIS OF GOOSE FAT IN THE TREATMENT OF CHRONIC ALLERGIC DERMATITIS

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Abstract: This study evaluated the effectiveness of goose fat-based ointments in the treatment of chronic allergic dermatitis. A total of 123 patients were divided into three groups, each receiving different ointments: Group 1 was treated with a goose fat + aloe extract + betamethasone formulation, Group 2 received goose fat + aloe extract, and Group 3 was treated with betamethasone-containing ointment only. Following the treatment course, a significant improvement in itching and reduction in rash area was observed in Groups I and III. Group II also demonstrated positive outcomes, although moderate symptoms partially persisted. Based on the overall results, modified goose fat-based ointments can be recommended as an effective and safe component of complex therapy.

Keywords: chronic allergic dermatitis, goose fat, betamethasone, itching, skin rash, clinical efficacy.

Relevance: Approximately 15–20% of the world population suffers from various forms of allergic dermatitis. Atopic dermatitis is recorded in 102 million children (about 4%) and 101 million adults (about 2%) worldwide [1,4,7,9]. Each year, consultations related to allergic skin diseases account for 25–30% of all dermatology visits. In developed countries, the prevalence of chronic allergic dermatitis is 10–20% among children and 1–3% among adults [6,8]. According to the American Academy of Allergy, Asthma, and Immunology, nearly 70% of chronic allergic dermatitis cases begin before the age of 5, and 60–80% of these cases persist into adolescence [2,3,5].

Aim of the study: To assess the effectiveness of goose fat-based ointments in the treatment of chronic allergic dermatitis.

Research methods: Considering different principles of modern scientific knowledge, we developed our research methodology in accordance with the set objectives. The study was planned and conducted using general scientific and specific methods aimed at solving the research tasks.

Patients included in the study were divided into 3 groups depending on the treatment regimen:

Table 1.
Distribution of patients by groups

№	Groups	n
I	Goose fat + aloe extract + betamethasone ointment	n = 38
II	Goose fat + aloe extract ointment	n = 41
III	Betamethasone ointment	n = 44

Group I: Goose fat + aloe extract + betamethasone ointment (n = 38).

Dosage: single dose – 0.5–1 g (fingertip amount), applied as a thin layer to the affected area.

Daily dose: 2 times (morning and evening).

Treatment duration: 7–14 days, with 10 days recommended in most cases.

Group II: Goose fat + aloe extract (n = 41).

Dosage: single dose – 0.5–1 g (applied moderately as a thin layer to the affected area).

Daily dose: 2 times per day.

Treatment duration: 7–10 days, in some cases up to 14 days.

Group III: Betamethasone ointment (n = 44).

Dosage: single dose – 1–2 g (applied freely to completely cover the affected area).

Daily dose: 2–3 times per day.

Treatment duration: 10–21 days.

Conclusions:

1. According to the study results, the group treated with goose fat + aloe extract + betamethasone ointment (Group I) demonstrated a significant reduction in itching ($\chi^2 = 20.48$) and a statistically meaningful decrease in rash area ($\chi^2 = 11.71$). These findings indicate the strong anti-inflammatory and regenerative potential of this modified formulation. Particularly in severe cases (<30–50% lesion area), stable restoration of skin condition confirms the effectiveness of this complex therapy.

2. In Group II, analysis showed a reduction in itching severity ($\chi^2 = 17.44$) and a decrease in rash spread ($\chi^2 = 11.79$). However, moderate itching and rashes covering 10–30% of the area remained in some patients after treatment. This suggests that the ointment is mainly effective in mild to moderate cases, making it a suitable steroid-free alternative for patients with moderate inflammatory symptoms.

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