

P50

Urea-containing moisturizer vs. oil-containing balm: open-label crossover study

Udovichenko O., Bublik E. South-western district diabetic foot outpatient clinic, Moscow, Russia.

Aims: Skin xerosis is one of pathways to diabetic foot, so it should be treated actively. Although urea-containing moisturizers were shown to be more effective than traditional oil-containing balms, data of clinical studies were controversial.

Object and methods: We studied 45 patients with type 1 or 2 diabetes mellitus with foot xerosis not as a result of particular skin diseases (ichtiosis etc.). Half of patients (group 1) started this crossover study from urea-based moisturizer 'Balsamed-intensive' (Esparma GMBH, Germany), other patients (group 2) – from traditional oil-containing balm. Each preparation has been applied twice daily during 1 month. Mean patients age was 60 ± 12 yrs, diabetes duration – 13 ± 7 yrs. Xerosis was graded from 0 to 8 according to scale published by Exelbert, 1999. Impression of patients just after applying of preparation (pleasant / unpleasant / indifferent sensations) was assessed with a questionnaire.

Results: Groups 1 and 2 didn't differ significantly by age, diabetes duration, M:F and diabetes types ratios. Xerosis was graded as 5.3 ± 1.6 and 4.6 ± 1.8 respectively, $p > 0.05$. As Balsamed, as traditional balm improved xerosis significantly ($p < 0.05$ vs. baseline). Nevertheless, Balsamed reduced xerosis grade more effectively (by 44% vs. 22%, or by 2.4 ± 1.7 vs. 1.2 ± 1.0 , $p < 0.05$). Number of patients with results considered as 'very good' (xerosis grade improvement by 50% or more) was 45% for Balsamed and 25% for traditional balm ($p < 0.05$). Feelings of patients after applying of preparation were similar in both groups ($p > 0.05$).

Conclusions: This urea-based moisturizer showed higher efficacy than traditional balm. Important that efficacy does not depend on feelings of patient just after applying of balm. Patients should be warned about this, and urea-based moisturizers should be recommended.