Evaluation of the amelioration of skin xerosis in a diabetic patient population followed by a group of podiatrists in a multidisciplinary setting and treated with a Naqi-Body Care® cream, medical skin care

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Introduction

In diabetic patients xerosis can appear when there are secondary neuropathic or vasculopathic disorders. The reduced flexibility in the stratum corneum leads to the formation of microfractures that provide points of entry for infectious agents. Xerosis can also aggravate the pruritus.

The treatment of diabetic xerosis should improve the quality of life of patients and boost preventive anti-infectious measures. Very few dermocosmetic products are specifically aimed at controlling diabetic xerosis and very few studies have been dedicated. We performed a study with Naqi Body Care®.

Methods

In this study, patients visiting the podiatry department were asked to take part in a prospective observational study in case they had a dry skin. At the start, all abnormalities of the skin were scored.

Patients were asked to cream their feet twice a day. A follow-up with the podiatrist (pod) was organised at 4 and 8 weeks. The quality of the skin was evaluated by the patient (pa) every 2 weeks.

At the end, the quality of the cream was evaluated on the basis of these characteristics: viscosity, spreadability, penetration of the product into the skin, softness, hydration and lastly an eventual prickling feel.

Results

1. Patient characteristics

A cohort of 89 patients took part in the study. The mean age of the patients was 60.2 +/- 1.5 years and the duration of their diabetes 14.3 +/- 1.6 years. 67.7% of the participants are male. All patients had skin xerosis at the start of the study, in which 57.6% in a relatively severe form. 42.4% had blisters.

2. Skin Evaluation

After a period of two weeks, 53.40% of the patients showed a sufficient amelioration of the skin roughness. After eight weeks a visible amelioration in 39.70% (pa: 37.9 %) of the patients’ skin was noted. 20.7% of the patients (pa + pod) had regained a normal skin.

After four weeks the xerosis (evaluated solely by the podiatrist) had clearly and visibly ameliorated in 39.30% (pa: 29.5%) of the patients. After eight weeks this number went up to 45.90% (pa: 45.9%). The skin felt normal in 15 % (pa: 14.8%) of the patients.

At four weeks the suppleness of the skin goes, 51.90% (pa: 47.1 %) of the patients showed a visible skin amelioration after eight weeks. 14.80% (pa: 21.6 %) showed a normal skin.

As far as the dry feel of the skin had visibly ameliorated after four weeks in 39.30% (pa: 29.5%) of the patients. After eight weeks this number went up to 45.90% (pa: 45.9%). The skin felt normal in 15 % (pa: 14.8%) of the patients.

The dry feel of the skin had visibly ameliorated after four weeks in 39.30% (pa: 29.5%) of the patients. After eight weeks this number went up to 45.90% (pa: 45.9%). The skin felt normal in 15 % (pa: 14.8%) of the patients.

The following aspects were taken into consideration: dry feel of the skin, roughness, the presence of scales and the suppleness of the skin.

At the end of the study 23.3 % of the patients had a normal or almost normal skin. 66.6 % of the patients in the testing group showed a sufficient and visible amelioration.

3. Cream evaluation

The cream itself was evaluated in a similar way, both by the patient and the podiatrist. Each party gave scores for perfect viscosity (pa: 66.1 % vs. pod: 74.6%), rapidity of penetration (pa: 50% vs. pos 42,4%), and feeling of very good hydration (pa: 39,7% vs. pod: 35,6%). Almost no skin irritation was noted (pa: 94,9% vs. pod: 96,6%).

Conclusion

The compliance of the patients during the course of this small study was high. The positive effects of the cream on the amelioration and restoration of the skin were clear and visible after a relatively short period of time. Hence, the cream is positively evaluated, both by the podiatrists as the patients. There was no significant difference between both parties’ scores. Further studies are required to evaluate the long term effect of the cream.

Uhoda E, Debatisse B, Pacquet P, Piéard- Franchimont C, Piéard GE. Dry Skin in Diabetic Patients. Rev Med Liége. 2005 60;1 – 4

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Poster presented during the 5th international symposium on the diabetic foot, Noordwijkerhout, 09 – 12 may 2007, The Netherlands