AT A GLANCE

POSITION PAPER DIAGNOSTICS AND THERAPY OF XEROSIS CUTIS

QUICKLINK DIAGNOSIS AND TREATMENT OF XEROSIS CUTIS – A POSITION PAPER

BACKGROUND & RATIONALE

METHODOLOGY
Using a structured literature search, 169 systematic reviews and core publications were identified and evaluated by a panel of six high-ranked dermatologists. On the basis of this evidence and expert opinion, the diagnosis and therapy algorithm was developed with recommendations for practical use.

DEFINITION OF XEROSIS
Xerosis Cutis (synonym: dry skin, xerosis, xeroderma) is a skin condition poor in hydrolipids, which is characterized by a reduced quantity and/or quality of lipids and/or hydrophilic substances (the so-called Natural Moisturizing Factor).

FREQUENCY
Xerosis Cutis is one of the most frequent findings in dermatological and general medical practice with an estimated prevalence of at least approx. 10 million patients per year in Germany.

CAUSES OF XEROSIS
Xerosis Cutis is a disorder of the natural barrier function and/or a lack of moisturizing factors of the skin, which lead to a reduced hydration of the skin.

DIAGNOSTICS OF XEROSIS CUTIS

Xerosis Cutis is basically a clinical diagnosis. Triggers and/or underlying diseases must be identified and specifically treated. (100 % consensus)

ASSESSMENT OF SKIN FINDINGS AND SYMPTOMS
For the selection of a suitable basic therapy for Xerosis Cutis, the evaluation of scaling, fissures/rhagades, redness and pruritus is particularly important (Fig. 1a-c). Age-dependent and physiological peculiarities of certain localizations must be taken into account. (100 % consensus) The diagnosis of Xerosis Cutis is standardised by the Xerosimeter developed here.

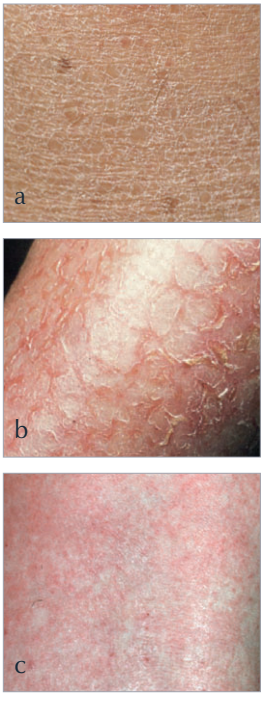

Fig.1: a: Heavy scaling, b: severe fissures, c: moderate redness

MANAGEMENT OF XEROSIS CUTIS

DEFINITION OF TOPICAL BASIS THERAPY
Basic therapy for the treatment of Xerosis Cutis are topical dermocosmetics with remoisturising, refattening, film-forming, skin-soothing and/or itch-relieving active ingredients.

BASIC PRINCIPLES OF TOPICAL THERAPY
The basic therapy of Xerosis Cutis is intended to improve the hydration of the skin, compensate for a lack of barrier lipids and improve the barrier function of the skin. A combination of hydrophilic and lipophilic components is therefore preferable (100% consensus).

CHOICE OF FORMULATION
The drier the skin, the more oily the base should be (medium, 83% consensus). In acute inflammatory disease stages, bases with a higher water content are preferable. Skin-soothing and itch-relieving substances can be added (strong, 100% consensus). Pure fats/oils are NOT suitable for permanent basic therapy (strong, 100 % consensus).

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INGREDIENTS: CLASSIFICATION AND EVIDENCE FOR XEROSIS CUTIS

In the selection and composition of the ingredients, care should be taken to ensure that proof of restoration of barrier function has been clinically demonstrated. (strong, 100 % consensus)

UREA

Based on the available scientific data, urea is the gold standard for the treatment of Xerosis Cutis. Urea not only effectively hydrates the skin, but also improves the barrier function and the skin's own defence and hydration mechanisms. It increases the penetration of active substances into the skin, relieves itching and – in higher concentrations – has a keratolytic effect. For topical application, both concentration and galenics should be chosen depending on the individual skin findings, the age of the patient and the underlying dermatosis. It should not be used on inflammatory, open areas or on children's skin < 2 years (Stinging effect). In combination with ceramides and NMF, the hydrating efficacy of urea is superior to a pure base or an external containing only urea.

ADDITIONAL NMF

The term "Natural Moisturizing Factor" (NMF) refers to a group of water-binding substances in the epidermis. The NMF of the skin includes urea (urea), lactic acid derivatives, pyrrolidonecarboxylic acid (PCA), amino acids and inorganic salts. A reduction of NMF in the epidermis has been observed in Xerosis Cutis, atopic eczema, ichthyosis vulgaris, and later in life [41]. Also regular washing with soap, too hot bathing or showering as well as UV exposure can lead to a reduction of the NMF content in the skin. Clinically, a lack of NMF leads to roughness, scaling, fissures and rhagades.

CERAMIDES

Ceramides are an essential component of the physiological lipid barrier. In the therapy of Xerosis Cutis, they achieve better barrier-stabilizing results in combination with urea, NMF and glycerol than when used alone.

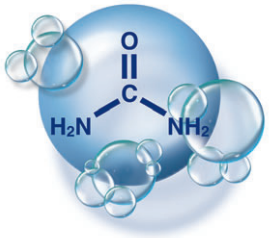

Abb. 2: Urea is the gold standard for the treatment of Xerosis Cutis

THERAPY ALGORITHM

SCALING

The expert consensus recommended the ingredient urea (100 % consensus, strong) for all severity levels of desquamation. The choice of the concentration depends on the localization or the dermatological underlying disease. The combination of urea with ceramides, NMF and glycerol/gluco-glycerol shows a significantly better effect than the effect of urea or the vehicle alone.

RHAGADES/ FISSURES

Externa containing urea are recommended to prevent rhagades. A combination of urea with glycerine and ceramides is also recommended. Urea should not be used for open rhagades. Dexpanthenol can be used here.

ERYTHEMA

There is a strong consensus (100 %) for the use of Licochalcone A for redness depending on the body region.

PRURITUS

Urea (strong consensus, 83%) and polidocanol (medium consensus, 67%) are used to treat pruritus in dry skin.