

Neurodermitis (Atopic Eczema)

a) Definition

The term neurodermatitis was introduced by Louis A.J. Brocq (1856 – 1928)

Neurodermatitis is one of the most widely spread skin diseases.

Typical neurodermatitis is a genetic disposition toward dry skin and the development of eczema accompanied by the inherent disposition toward possible allergic reactions (hay fever, rhinitis allergica, allergic bronchial asthma etc.).

b) Different Forms of Neuroermatitis

- Atopic Dermatitis (Sever Chronic Skin Disease)
- Neudodermatitis Diffusa: Very itchy widespread skin alterations.
- Neurodermatitis Disseminata (Spread throughout the entire skin)
- Neurodermatitis Constitutionalis (inherent or contracted)
- Eczema Flexurarum (Predominantly at the edges of the bends of arms and knees)
- Prurigo (Appearance of urticarial papules – nettle rash) often connected to neurodermatitis
- Perennial allergy of the mucous membranes resulting in all-season ailment of the mucous membranes such as runny nose or an allergic reaction to dust mites.
- Pollinose Hay Fever – pollen allergy caused by weeds, trees, herbs etc.
- Asthmatic Bronchitis: Problems with the upper or lower respiratory tract
- Asthma

c) Occurence

Approximately 2 to 5 percent of the population are suffering from neurodermatitis. This means that in Germany about 1.6 to 4 million people are affected with neurodermatitis.

d) Possible Causes and Negative Factors

- *Psychological Factors: Neurodermatitis is a neurally caused inflammation of the skin or psycho-dermatosis*
- *Various Vaccinations*
- *Metal Allergy*
- *Intracutaneous Test*
- *Wearing rough clothing*
- *Intolerance of or real allergy to cosmetics*
- *Allergic reactions to animal hair*
- *Skin contact with bases and other chemicals substances*
- *Heavy transpiration intensifies the itch*
- *Penicillin*
- *Diseases such as bronchitis or chicken pox etc.*

e) Common Treatment Methods

- UV Exposure
- Tar has an anti-inflammatory, anti-eczematous and anti-puritic effect
- Corticosteroids (Cortisone)
- PUVA (Blacklight, Photo-Activated Chemotherapy): UVA radiation has only a mild anti-psoriatic effect on its own. Therefore the skin is sensitized with 8-Methoxy-Psoralen (Meladinine, internally or as solution / ointment) and then irradiated with UVA.
- Balneo-Climatotherapy: Patients affected with neurodermatitis are extremely sensitive to changes in the weather and this sensitivity to weather can be used therapeutically (e.g. spa clinics at the north sea).
- Basic fatty ointments, oil baths
- Sedatives
- L-Peptides: Fragmented proteins have been developed from untreated cow milk.

f) Treatment of Neurodermatitis in the Dead Sea Region

The proven method of climatotherapy or thalasso therapy is also used for treating neurodermatitis at the Dead Sea. It has been discovered that the interaction of various regional climatic factors ensures very positive therapeutic results. After their admission to the clinic the patients are examined by a dermatologist and an internist. When anamnesis and examination are completed and the extent of the disease on skin and mucous membranes has been verified, the diagnosis as well as the treatment plan are prepared. The treatment is comprised of three or four stages:

- **Stage 1:** Focus on the patient's adjustment to the new climate, the environment and new dietary habits.
- **Stage 2:** Therapeutical development phase in which the natural conditions of the Dead Sea region are used
- **Stage 3:** Stabilisation of the results so far
- **Stage 4:** Normalisation and inurement of skin and psyche

At first all negative (stress) stimuli must be removed from the patient's surroundings. As the term neurodermatitis suggests the patients are neurally unstable. In addition to the removal of negative stimuli this therapeutic phase often makes use of zinc ointments, moisturizers, and oil baths (which must be tested for compatibility in order to guarantee success) and the reduction of inner stimuli, for example by prescribing antihistamines.

After this temporary starting phase of about one week the great therapeutic features of the local climate become fully effective in the second development stage. On the one hand this includes the dry, warm, allergen free desert air, which is rich in bromine and oxygen. This is due to the increased O₂ pressure because of the region's location 400 meters below sea level. On the other hand this involves sunshine with an increased amount of UVA radiation and proportionally less UVB radiation. Due to the optimal use of these climatic conditions during the development stage the inflammatory symptoms on the skin quickly recede, the itch vanishes, the excoriations heal and the patient's overall psychological condition improves.

Stage 3 also includes the use of fatty ointments and the patients are allowed to expose themselves to direct sunlight for increasing amounts of time. A therapeutic cycle develops: Showering (in order to wash off sweat and cool the skin), exposure to the sun (with steadily increasing duration), cream (to achieve smoother skin) and repeat.

After achieving a smoother and softer skin without signs of lichenification, stage 4 attempts to inure the skin with brief sea water baths, which the patients usually react to very well. Since the skin of patients with neurodermatitis requires a very long regenerative period stage 4 is reached only after one or more stays in the Dead Sea region.

Psychological Support and Care

The therapeutic measures are supported by individual interviews and meetings in support groups as well as instructions on improving the overall quality of life and self esteem. Patients are also briefed on how to handle their own skin and its tendency to overreact and become irritated and on general skin care. They also receive dietary instructions.

Diet

We do not recommend a particular diet to people affected with neurodermatitis. We ask about previous eating experiences, food intolerances and dietary habits. From this we deduce the necessary consequences regarding food preparation (spices, fats, oils) and the choice of food and drink. We also attempt to achieve a full rehabilitation of skin and psyche by organizing day trips in this historically, religiously and scenically highly interesting country.

Treatment Information

Recommended Treatment Period

March – Mid-June and September to Mid-November

Recommended Duration

3 – 6 weeks