

# **NEURODERMITIS**

Neurodermatitis (synonyms: atopic eczema, atopic dermatitis) is a chronic inflammatory skin disease that occurs in episodes. It often manifests itself on the scalp, face and hands and is characterised by excruciating itching. In industrialised countries, around 15-30% of children suffer from atopic dermatitis. Adults are affected in 10% of cases.

## **MAIN SYMPTOMS**

- dry, red, cracked, and itchy skin, especially on flexor surfaces
- sometimes with weeping blisters, lumps, and scales
- In adults:
  - bending folds on the back of the knees and elbows,
  - face, neck,
  - wrists and hands

#### ■ In children:

- bending folds of the back of the knees and elbows,
- wrists
- back of thighs, buttocks
- possible eczema around the mouth
- frequently dry skin with scaling

#### ■ In infants:

- milk crust (yellowish-white crusts), cheeks, scalp, outer sides of arms and legs
- weeping, blurred, itchy skin changes

## **CAUSES AND PATHOGENESIS**

- causes largely unknown, multifactorial
- relapsing course, possible initiated by trigger factors such as food, psychological stress, infections, weather conditions, contact with irritating substances
- often accompanied by allergies or pseudoallergies → histamine release leads to (additional) itching and skin irritation
- genetic defects presumably lead to impaired skin barrier
- immunological dysregulation of the TH1/TH2/ TH17-controlled immune system
- mis-colonisation of skin and mucous membranes, often increased Staphylococcus aureus and Candida albicans

## **THERAPY**

- bowel therapy
- probiotics (recording to the report, histamine lowering and blocking probiotics if necessary)
  - prebiotics (acacia fibers, 2'FL, scFOS/scGOS)
  - inflammation inhibition (phosphatidylcholine, glutamine)
  - mucosa and milieu stabilizing interventions (humic acids, zeolite)
  - for excess histamine, see HIT overview
- regulate tryptophan and catecholamine metabolism (depending on the report)
  - Trp, griffonia
  - curcumin, quercetin, indole-3-carbinol
- compensating for nutrient deficiencies
  - vitamin B3, B6, B12, D
  - selenium, zinc

- eliminate inflammations and ROS
  - omega-3 fatty acids, vitamin C, E
- additional measures
  - eat a balanced diet rich in fibre
  - avoid triggering foods
  - adequate intake of good oils with a high PUFA content
  - avoid alcohol and nicotine
  - reduce/avoid stress
  - avoid excessive skin cleansing

## **DIAGNOSTICS**





## **SA740A NEURODERMITIS**

**BASIC PROFILE** 

Material: Fe, OS, S

#### Microbiome changes

Microbiome analysis Mini incl. Candida

## Inflammation, Low-grade Inflammation (Leaky gut)

- α1-antitrypsin, calprotectin
- zonulin

## Food incompatibilities

Pre-Screen B



## **SA740C NEURODERMITIS**

**COMPLETE PROFILE** 

Material: 2Fe, OS, EDTA, 2 Hep → , S → , T909, T928

In addition to the Midi Profile:

## Microbiome changes

Microbiome analysis Midi incl. parasites

## Maldigestion

pancreatic elastase, bile acids in the stool

## **Anti-inflammatory factors**

fatty acid status (omega-3, omega-6 fatty acids)



## **SA740B NEURODERMITIS**

**MIDI PROFILE** 

Material: 2Fe, OS, Hep, S → , T909, T928

In addition to the Basic Profile:

## Tryptophan metabolism

Trp, serotonin, metabolites

#### **Relevant cofactors**

• vitamin B3, B6 (cystathionine), vitamin B12 (MMA)

#### **Nitrosative stress**

citrulline, MMA

## Immune activation/inflammation

neopterin

#### **Intestinal influencing factors**

- TMA, TMAO
- bacterial uraemic metabolites

## **Essential minerals**

- zink
- selenium

#### **Digestive residues**

## **Mucosal immunity**

slgA

## Food incompatibilities

histamine in the stool

# **ADDITIONS**

## In s/o intolerance to food additives or preservatives

C560 CAST / Pseudoallergy Screening Profile

## In s/o carbohydrate intolerances

- B120 fructose malabsorption Breath Test
- B110 lactose Intolerance Breath Test
- B130 sorbitol malabsorption Breath Test