

# Dermatitis seborrhoica

**Seborrheic dermatitis** (SD) is a common papulosquamous skin disease of unknown etiology with a subacute to chronic course. It mainly affects the so-called seborrheic localizations, ie areas of the skin rich in the presence of sebaceous glands, specifically the facial area (nasolabial furrows, eyebrows, eyelids, forehead), hairy parts of the head, upper torso and intertriginous areas. It is characterized by peeling in greasy yellowish scales and redness of varying intensity. It affects various forms of newborns and infants, but also adults around the 4th decade, mostly male. The incidence in the adult population is estimated at 3-5%. Topical antifungals and corticosteroids are mainly used in the treatment of seborrheic dermatitis.

## Etiopathogenesis

The etiopathogenesis is currently not fully clarified. There are THE considered predisposing factors:

- increased activity of sebaceous glands with overproduction of sebum - so-called seborrhea or status seborrhoicus;
- hormonal influences (especially androgens);
- multiplication of lipophilic yeasts of the genus *Malassezia* (or *Pityrosporum sp.* ), which form a common skin microflora;
- hyperhidrosis;
- external application of oil preparations, systemic application of corticosteroids or immunosuppressants;
- climatic factors (worsening of symptoms in the winter months, on the contrary, the decline of difficulties in the summer, in the mountains and at sea);
- endogenous effects: heredity (familial occurrence has been observed, however the effect of heredity has not been confirmed), obesity, Cushing's disease, diabetes mellitus, hypovitaminosis B, Parkinson's disease, stroke, menopause, emotional stress and reduced cellular immunity;
- HIV positivity (frequent occurrence of severe forms of seborrheic dermatitis).

## Clinical forms

### Dermatitis seborrhoica infantum (seborrheic dermatitis in infants)

More than 2/3 of infants aged 3 weeks to 3 months are affected by seborrheic dermatitis. The symptoms start earlier than in atopic dermatitis.

Typical manifestations:

1. small yellow-brown scales on the pale pink base on the forehead (especially frontally and parietally);
2. cracked yellow-gray or yellow-brown firmly adhering deposit of greasy scales in the area of the large fountain - "cradle cap".

It can spread from the forehead to the eyebrows and middle part of the face in the form of sharply demarcated light red deposits with peeling greasy yellow scales. Heavier forms also spread to intertriginous areas in the form of infiltrated non-swelling erythematous squamous deposits. Complications include the association of yeast infection. More severe development can be seen in children on infant formula .

### Pathogenesis

Increased activity of the sebaceous glands due to temporary high endogenous production of androgens by the adrenal cortex; altered ratios of unsaturated fatty acids; temporary changes in  $\delta$ -6-desaturase enzyme function (conversion of linolenic and arachidonic acid to long chains of unsaturated fatty acids); immunological abnormalities, complement activation and colonization by lipophilic yeasts of the *Malassezia* type (*Pityrosporum ovale*). In infants with seborrheic dermatitis, *Candida albicans* is detected in the stool and on the skin.

In immunodeficient children, it can progress to erythrodermia ( *erythrodermia desquamativa Leiner* ) with marked lamellar peeling of the skin of the whole body, fever, diarrhea and vomiting with dehydration and metabolic acidosis.

In childhood, the clinical manifestations of seborrheic dermatitis subsequently disappear or are only very mild, similar to adolescents.

### Tinea amiantacea

*Tinea amiantacea* is a form of seborrheic dermatitis in school children. It manifests itself in the form of bounded non-inflammatory, peeling deposits on the forehead - the scales overlap and resemble asbestos or dermatomycosis in appearance and color.

### Erythema paranasale

Erythema paranasale is a form of seborrheic dermatitis in adolescents. It is manifested by a sharply demarcated erythema with seborrheic scales in the nasolabial and nasophacial grooves. It is very resistant to routine treatment. Long-term or repeated treatment with topical corticosteroids leads to perioral dermatitis.

## **Dermatitis seborrhoica capilitii**

Dermatitis seborrhoica capilitii is a form of seborrheic dermatitis that often occurs in adolescents and adults.

## **Pityriasis simplex capiliti**

According to some sources, pityriasis simplex capiliti or common dandruff is one of the most common forms of seborrheic dermatitis. However, according to other sources, it may be considered as a separate disease.

## **Dermatitis seborrhoica adultorum (seborrheic dermatitis in adults)**

In its basic form, it affects seborrheic locations. The deposits here are sharply demarcated, yellowish-pink, peeling greasy scales. The scales deposit in layers.

There are several characteristic forms: retroauricular, medi thoracica, intertriginosa, etc. Differential diagnostics must distinguish: psoriasis, pityriasis rosea, mycosis fungoides and others.

## **Therapy**

Treatment is usually lengthy due to a chronically recurrent course. In the first 2 weeks of treatment. **Combined corticoid preparations with antifungals** can be used, followed by long-term monotherapy with topical antifungals. Topically applied azole antifungals contain flutrimazole, etoconazole, econazole.

Seborrheic dermatitis in **infants from 6 months** - salicylic oil. It is recommended to soak the scales bearings twice a week at least 3 hours before bathing to soften the scales and then comb them with a soft brush and wash with shampoo. In infants and young children, there is a risk of percutaneous resorption of toxic amounts of salicylic acid.

Seborrheic dermatitis **in younger infants** - mechanical removal of scales by a gentle finger massage or a soft brush while washing the head with baby shampoo; or an hour before washing the head, apply mineral oil to the hair and wrap the head with a warm wet cloth ; urea creams and lotions can also be applied (even daily).

Mild forms of seborrheic dermatitis **in the hair of children and adolescents** - over-the-counter shampoos with antiseborrheic ingredients (tars, salicylic acid, organic sulfur compounds, antifungals, antimicrobials, zinc pyrithione, octopirox and others). The effect does not start until after 6-8 weeks of using the product. More serious focal lesions in the hair area - shampoos with antiseborrheic additives + interval treatment with local corticosteroids (solutions, gels, lotions - often combined with salicylic acid).

**Intertriginous areas in infants** - antifungals in pastes, soft zinc pastes. **Outside the intertriginous area** - soft pastes or creams with corticoids and antibacterial substances (cloroxin - endiaron) or tar additives (tincture carbonis detergent, ichtamol)

## **Links**

## **References**

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