




# NEURODERMATOSES.


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**Neurodermatoses - a group of skin diseases with chronic duration, intensive skin itch and disorder of CNS.**



## ■ CLASSIFICATION:

- 1. Skin itch (universal and topic).
  - 2. Chronic recurrent urticaria.
  - 3. Prurigo (of infants, of adults, nodularis).
  - 4. Atopic dermatitis (Vidals lichen, diffuse, disseminated).
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Skin itch is characterized by absence of primary elements, secondary elements in form of excoriations, lichenification, dischromia.

The complications of skin itch – are secondary infection, deep traumatic scars, cosmetic defects.



# ETIOLOGY

In the basis of skin itch may be somatic , neurotic, psychiatric (psychosomatic) diseases.

In group of somatic skin itch concern:

- 1) oncologic diseases, oncologic diseases of the blood (paraneoplastic itch);
- 2) diseases of the liver (hepatitis, cirrosis);
- 3) diseases of gastro-intestinal tract (gastritis, duodenitis, disbiosis of intestine);
- 4) helminthoses;
- 5) parasitic diseases (lambliaosis, toxoplasmosis, mykoplasmosis);
- 6) metabolic diseases (diabetes mellitus, thyrotoxicosis, mixedema),
- 7) topic infections (tonsillitis, caries).

# Classification

In group of neurogenic (psychogenic) skin itch concerns different diseases of CNS:

- 1) organic (cerebroscclerosis, tumors and traumas of the brain);
- 2) functional (psychosis, neurosis, psychapatias).

In the basis of topic itch take place:

- 1) urogenital, infections, helmintoses, tumors of intestine;
- 2) atrophy of skin caused by the age of patients;
- 3) diabetes.

# PATHOGENESIS

Skin itch appears after histaminoliberation from mastocytes in the skin or basophiles in the blood, from gastro-intestinal tract.

In patients with oncologic diseases may be toxicallergic paraneoplastic itch.

# Clinical picture

- Universal skin itch localized on all skin and characterized by excoriations, lichenification, poikiloderma (hyper pigmentation, depigmentation). Secondary infection occurs in form of pustulas, purulent crusts.
- Topic itch localize on the skin of anus, external genitals. The scratching of anogenital area result in bacterial and fungal infection (candidosis).



# TREATMENT

- The treatment of skin itch include : 1)etiologic, 2)pathogenic, 3)symptomatic treatmnt.
- **Etiologic treatment** depends on nature of skin itch. Somatic itch is treated after examination of patient and consultation of **therapist, gastroenterologist, stomatologist, endocrinologist, neurologist.**
- **The treatment** neurogenic itch includes the removal of disorders of CNS, consultation of psychiatrics, psychotherapist, neurosurgen, and so on.
- **Pethogenic treatment** conclude :
  - 1) sedative drugs, antidepressants, anxiolytics, mixtures .
  - 2)antiallergic and antitoxic treatment include antihistaminic, natrii thiosulfatis, calcii gluconici, hepatoprotectors;
  - 3) acupuncture, hypnosis, psychotherapy;
  - 4) phisiotreatment (selective treatment, Darsonval treatment, ultrasound with hydrocortison ointment, radon baths, laser treatment, sea baths);
  - 5) topic treatment conclude ointments and creams with anaesthesin, mentol, dimedrol. Topic corticosteroids.
- **Symptomatic treatment** helps to diminish itch and neurotic disturbances.

# URTICARIA

- In group of neurodermatoses concern chronic recurrent urticaria, caused by histaminoliberation of different nature, contrary to acute toxoallergic urticaria.



# ETIOLOGY AND PATHOGENESIS

In basis of urtica elements the oedema of papillary layer of the dermis occur, caused by:

- 1) high activity of skin receptors (cold, warm, tactile);
- 2) neurogenic liberation of mediators from mast cells;
- 3) histaminoliberatin from gastro-intestinal tract (gastritis, duodenitis, disbiosis), from topical infections (tonsillitis, sinusitis, caries);
- 4) atopic predisposition, genetic hypersensitivity, blockade of beta-adrenoreceptors).

So, chronic urticaria is result from somatic, neurologic (psychologic) disorders. The patients must be examined. Consultation of allergologist (immunologist) may be after this investigation.

# Classification of urticaria

1. Cold.
2. Warm.
3. Mechanic.
4. Neurogenic (psychogenic).
5. Atopic.
6. Quinckes oedema.



# CLINICAL PICTURE

- Primary element is urtica. Skin rash is monomorphitic . Urtica is characterized by absence of secondary elements. The duration of urticaria may be from some days to some months. Dermografism in patients with mechanical urticaria is elevated. The itch is sever and scratching is no pleasant.

# Clinical picture

- **Quinces oedema** is characterized by edema of oral cavity mucosae, larynx, pharynx. May be urgent condition witch need treatment in reanimation department with big doses of common corticosteroids.
- **Atopic urticaria** is genetic prediposed disease multifactorial, poligenic. The duration of this urticaria is characterized by dependence on seasons, stresses, infections, food, mosquito bites. Usually atopic urticaria has family nature.
- **Diagnostics of chronic urticaria** conclude clinical and laboratory examination. Its necessary to use consultations of gastroenterologist, cure of topic infections, treatment of CNS disorders. In some cases the patients direct to allergologist (immunologist).

# TREATMENT

- Etiological treatment: cure of somatic diseases, topic infections, disturbances of metabolism.
- Pathogenic treatment: contraallergic, sedative, in chard cases common corticosteroids, plasmoferesis, sorbents, eubiotics.
- Symptomatic treatment: topic drugs (ointments, solutions, gels).
- Prognosis in chronic urticaria depends on condition of all organism, inner organs, CNS, spirit.

# Prurigo

Prurigo – is neurodermatosis multifactorial, hereditary with typical clinical symptoms – pale papule-vesicles, localized on trunk and limbs. Strong itch results in scratching of the skin and formation of crusts, lichenification.





# ETIOLOGY AND PATHOGENESIS

- As all neurodermatoses prurigo depends on somatic, psychosomatic condition of patients. Skin itch caused by histaminoliberation.



# Classification

1. Prurigo of infants.
2. Prurigo of adults.
3. Prurigo nodularis Hyde.
4. Prurigo Haebrae.




# Clinical picture

- Primary element – pale papule with microvesicle at the center. The scratching of the skin results in haemorrhagic crusts. Typical location - limbs, trunk, but not face, palms and soles. Severe itch may be the cause of abnormality of CNS, disturbance of sleeping.
- **Prurigo of infants** is different to prurigo of adults in more exudative inflammation. That's why prurigo of infants is called urticaria of infants.
- **Prurigo nodularis** likes to localized on the shins, feet. The clinical picture is similar to hypertrophic lichen ruber planus. In difficult cases the histological examination is used.
- **Prurigo Haebrae** – inherent, autosomno-recessive form of prurigo with manifestation after the born and chronic-recurrent duration. The skin of patients look like the skin of frog. On face, palms, soles skin rash is absent.



# TREATMENT

- The treatment of prurigo is the same, as treatment of urticaria and skin itch.
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# ATOPIC DERMATITIS

- Atopic dermatitis – one of most common skin diseases. AD is polygenic, multifactorial dermatosis with genetic predisposition and realization due to external and internal factors.



# ETIOLOGY AND PATOGENESIS

- Atopic predisposition is characterized by hypersensitivity of immediate type., histaminoliberation from mastocytes, blokade of beta-adrenoreceptors, abnormality of GET, peripheral nervous system, white constant dermografism.

# CLASSIFICATION

## According to age

1. AD of infants – ekzema of children.
2. Puberties stage - neurodermitis.
3. Adults stage – true ekzema.

## According to location

1. Disseminated.
2. Diffuse.
3. Localized – Vidal lichen.

# CLASSIFICATION

## According to clinical picture

1. Erytemato-scwamous.
2. Lichenoid.
3. Prurigo form.
4. Follicularis.





- Onset of disease may be at any age, but most common for the first months of life.
- Manifestation of AD is characterized by ekzematous lesions with sharp borders, microvesicles, “milk” crusts, typical for microbial ekzema.

In children and older clinical picture is different and characterized by lichenification of flexors, excoriations, and discoloration.

In adults AD may be in different forms: diffuse, disseminated, topical, erythrodermia.

- AD follicularis is typical for patients with ichthyosis vulgaris.
- Diagnostics of AD is based on absolute and optional signs (G.Rajka).

# Absolute signs:

1. Severe skin itch.
2. Chronic duration.
3. Dependence of clinical picture on the age of patients.



# Optional clinical signs:

1. Folds infraorbitalis, pigmentation periorbitalis (atopic eyes).
2. Pale skin and mucosa.
3. Constant white dermografism (abnormal peripheral nervous system).
4. Lichenification of flexors.
5. Dry skin, hyperkeratosis follicularis (ichthyosis vulgaris).

# Laboratory signs:

1. High level of Ig E.
2. Eosinophilia in haemogramma.
3. Recurrent disbiosis of intestine.
4. Immunodeficiency (immunogramma).
5. Allergic tests (in vivo and in vitro).

The complications of AD: streptococcal, staphylococcal, mixed pyodermas, Kaposi herpetiformic ekzema.

# Treatment

**Etiologic:** treatment of topic infections, desiases of gastrointestinal tract, endocrine disorders, disturbance of CNS.

## **Pathogenic:**

- 1)antihistamins, calcii gluconici, natrii thiosulfatis;
- 2)in severe cases systemic corticosteroids, citostatics, biological drugs;
- 3)sedative remedies, antidepressants, psychotherapy,
- 4)reflexotherapy, plasmoferesis;
- 5)topic treatment (ointments, creams with vitamins, corticosteroids, urea);
- 6)desert treatment;

**Symptomatic:** topic drugs with contraitch properties.

# TREATMENT

- In treatment of AD the care of the skin is very important. Different baths with sea salt, starch decoction, curative plants.
- After shower and bath must be topic treatment: ointments and creams hydrating, nutrating, keratolytic.
- Topic corticosteroids may be used for the short time in acute inflamated stage.

# TREATMENT

- **Symptomatic:** ointments included menthol, anesthesin, dimedrol.
- Desert: balneo treatment.
- **Prognosis:** individual, depends on somatic and psychological condition.
- Supervision must be by dermatovenerologist, therapist, gastroenterologist.
- Systemic corticosteroid is used only in severe cases for the short time.



Спасибо за внимание