

ETIOLOGY AND CLINICAL MANIFESTATION OF CUTANEOUS PSEUDOLYMPHOMAS

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SUMMARY

Cutaneous pseudolymphomas are reactive lymphocytic proliferations which appear in the skin and resemble a malignant lymphoma.

Most of the pseudolymphomas are caused by infections with *B. Burgdorferi*, others include tattoo reactions, immunizations or allergens desensibilization injections and infection with *herpes simplex* and *zoster*.

The most common clinical manifestations are: a single large nodule or solitary and multiple lesions. They are sharply bordered, soft, redish, dome-shaped and covered by thinned skin.

The sites of predilection are the ear lobes, nape, nipple and areola, axillae, scrotum and dorsum of the foot.

Key word: Cutaneous Pseudolymphomas etiology, clinical manifestation

Etiology of cutaneous pseudolymphomas

Cutaneous pseudolymphomas are benign lymphoproliferating processes resembling malignant lymphomas clinically and histologically, in particular. They present an accumulation of lymphocytes in response to various stimuli: (infections, drugs, insect bites, etc.)^{1,2}. This is a heterogeneous group of dermatoses with clinical manifestations varying from tumor-like nodes to flat cell infiltrates. Many authors divide them into pseudolymphomas in the narrow sense and pseudolymphomas in the broad sense of the term. According to the type of the cell infiltrates, the cutaneous lymphomas are divided into T-cell and B-cell^(2,3).

The cutaneous pseudolymphomas are first mentioned in Bulgaria in a review published in a textbook and three articles, e.g. one on pseudolymphoma in Lyme's borreliosis (Hristova, Taseva), another on pseudolymphoma following a tattoo (Kazandjieva et al.) and the third article on pseudolymphoma following the administration of carbamazepine (Kavaklieva, Balabanova).

This gave us grounds to conduct a study about the etiology and the clinical manifestations of this interesting group of diseases.

Cutaneous pseudolymphomas are described in the presence of the following etiological factors^(3,4):

- Drugs – administered locally or systemically;
- Insect bites;
- Scabies;
- Borreliosis;
- HIV infection;
- Herpes Zoster;
- Vaccines – antihepatitis B;
- Injection of antigens;
- Tattoos – a rather common cause;
- Acupuncture;
- Gold earrings.

In a significant percentage of the cutaneous lymphoma cases the etiological cause cannot be determined and thus, the so-called group of idiopathic forms is distinguished.

Clinical manifestation of the cutaneous lymphomas:

- Usually, single lesions are observed in the form of plaques and tumors;
- The predilection localizations include the head, the ear lobules, the nose, and in children, on the thorax;
- In most of the cases the prognosis is good but in about 23 % of the cases of cutaneous lymphomas (primarily the idiopathic forms) cutaneous malignant lymphoma is suspected;
- Treatment with corticosteroids and antibiotics is effective in most of the cases.

*The clinical manifestation of skin after infection with *Borrelia burgdorferi*:*

Children are more frequently affected. The predilection localizations include the ear lobules, the nose and the scrotum region. Erythematous plaques are observed or node-like changes with a diameter of 1-5 cm. Frequently, there is an enlargement of the regional lymph nodes. The lesion may persist for months or more than a year, if not treated.

Serological diagnostics is required.

Persistent nodular lesions resulting from Scabies or arthropods bite.

The alterations consist of numerous dense brown erythemic papules and nodules accompanied by itching and localized on the genitalia, the abdomen, the axillae and the elbows. They may persist for months after adequate antiscabious therapy.

Drug-induced pseudolymphomas

They can be subdivided into:

1. Induced by anticonvulsants;
2. Induced by other drugs.

The cutaneous pseudolymphoma induced by anticonvulsants develops in the first 2 to 8 months following the drug administration but it is possible for it to appear much earlier (5 days) or much later (up to 5 years) after the initiation of treatment. Clinically, it presents with febrility, lymphadenopathy, hepatosplenomegaly, blood eosinophilia and erythemic eruption in the form of single papules,

plaques and nodules. Erythrodermia has also been described stimulating the Sezary's syndrome with characteristic cells in the peripheral blood.

The cutaneous pseudolymphomas may be induced by other medications such as:

- neuroleptics;
- ACE – inhibitors;
- β – blockers;
- Antihistamines and cytostatics.

It is considered that in lymphatoid drug eruption the immunological function is reduced and the immune control is impaired, thus leading to abnormal lymphocyte proliferation, increased functioning of the T-suppressors and the hypogamaglobulinemia (Kardaun etol.).

It is proved that for Bulgaria, the exogenous and etiological factors (parasites, insects, viruses, tattoos, etc) play a major role for the occurrence of the cutaneous pseudolymphomas, unlike in the European countries and the USA where the drug-induced cases prevail.

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