

Scientific Article

UDC 616.-006.441

DOI: 10.17816/pmj415124-128

## A CLINICAL CASE OF SKIN LYMPHOCYTOMA IN A YOUNG WOMAN

**M.Yu. Kobernik\*, V.D. Elkin, Z.A. Krasilnikova, E.V. Plotnikova***E.A. Vagner Perm State Medical University, Russian Federation*

## КЛИНИЧЕСКИЙ СЛУЧАЙ ЛИМФОЦИТОМЫ КОЖИ У МОЛОДОЙ ЖЕНЩИНЫ

**М.Ю. Коберник\*, В.Д. Елькин, З.А. Красильникова, Е.В. Плотникова***Пермский государственный медицинский университет имени академика Е.А. Вагнера,  
Российская Федерация*

A 25-year-old woman came to consult a dermatovenerologist. The woman complained of a rapidly progressing painless lump on the right wing of her nose which developed after photo-rejuvenation treatment and the development of herpetic infection in the place of a previous lipoma removed by radio wave surgery. The clinical picture was characterized by a solitary disc-shaped plaque, 2 cm in size, bluish-reddish-brownish in color, of a doughy consistency, significantly protruding above the skin surface, with clear borders and a smooth, shiny surface. There was a complex differential diagnostics, the final diagnosis was confirmed by the results of a histological examination, which revealed changes characteristic of lymphocytoma. The patient was treated with aminoquinoline preparations and topical glucocorticosteroids and rapid positive dynamics with complete regression of the skin pathological process was observed.

A clinical case of skin lymphocytoma that occurred after several successive trigger factors such as lipoma formation and removal, photo rejuvenation procedures, and herpes infection is presented in the article. This is a fairly rare disease that does not have a pathognomonic clinical picture, so it is difficult to differentiate and diagnose it. The results of a pathomorphological examination are essential for the diagnosis. A positive effect with a complete regression of skin changes can quickly occur if treated correctly.

**Keywords.** Skin lymphocytoma, trigger effect, solitary plaque, pathomorphological examination.

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tel. +7 902 830 20 92

e-mail: margo110875@yandex.ru

[Kobernik M.Yu. (\*contact person) – PhD (Medicine), Associate Professor of the Department of Dermatovenerology, ORCID: 0000-0002-3549-0076; Elkin V.D. – DSc (Medicine), Professor, Head of Professor of the Department of Dermatovenerology, ORCID: 0000-0003-4727-9531; Krasilnikova Z.A. – 6<sup>th</sup>-year Student of the Medical Faculty; Plotnikova E.V. – Assistant of the Department of Dermatovenerology].

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тел. +7 902 830 20 92

e-mail: margo110875@yandex.ru

[Коберник М.Ю. (\*контактное лицо) – кандидат медицинских наук, доцент кафедры дерматовенерологии, ORCID: 0000-0002-3549-0076; Елькин В.Д. – доктор медицинских наук, профессор, заведующий кафедрой дерматовенерологии, ORCID: 0000-0003-4727-9531; Красильникова З.А. – студентка VI курса лечебного факультета; Плотникова Е.В. – ассистент кафедры дерматовенерологии].

Представлен клинический случай лимфоцитомы кожи. К дерматовенерологу обратилась женщина, 25 лет, у которой на правом крыле носа, на месте предшествующей липомы, удаленной методом радиоволновой хирургии, после серии процедур фотоомоложения и развита герпетической инфекции возникло быстро прогрессирующее безболезненное образование. Клиническая картина характеризовалась солитарной бляшкой дискообразной формы размером 2 см, синюшно-красно-буроватого цвета, тестоватой консистенции, значительно выступающей над поверхностью кожи, с четкими границами и гладкой, блестящей поверхностью. Проведена сложная дифференциальная диагностика, окончательный диагноз подтвердили результатами гистологического исследования, при котором выявили характерные для лимфоцитомы изменения. В лечении применялись аминохинолиновые препараты и топические глюкокортикостероиды, которые привели к быстрой положительной динамике с полным регрессом кожного патологического процесса.

Таким образом, в данном случае определена лимфоцитома кожи, возникшая после нескольких последовательных триггерных факторов: образования липомы и ее удаления, процедур фотоомоложения, герпетической инфекции. Это достаточно редкое заболевание, не имеющее патогномичной клинической картины, поэтому его сложно дифференцировать и диагностировать. Решающее значение для диагностики имеют результаты патоморфологического исследования. При корректных лечебных мероприятиях может быстро наступить положительный эффект с полным регрессом кожных изменений.

**Ключевые слова.** Лимфоцитома кожи, триггерное воздействие, солитарная бляшка, патоморфологическое исследование.

## INTRODUCTION

Lymphocytoma (benign lymphoplasia of the skin, benign lymphadenosis of Befferstedt, sarcoidosis of Spiegler-Fendt, lymphoid hyperplasia of the skin) is a rare dermatosis caused by benign reactive hyperplasia of the lymphoid tissue of the skin [1]. The disease was first described by E. Spiegler in 1894 and H. Fendt in 1900, but the term “lymphocytoma” was only proposed in 1921 by Kaufmann – Wolf [2]. It is observed mainly in young women. The etiology is not fully understood. Provoking factors include trauma, insect bites, infectious skin diseases, ultraviolet radiation, and external irritating drugs [3].

There are several clinical forms of the disease. The localized form is characterized by the development of a solitary plaque or node of a hemispherical shape, 2 cm in size, sharply protruding above the skin level, of a

doughy or dense elastic consistency, pinkish-brownish in color, with a smooth shiny surface, without subjective sensations. Diascopy reveals a yellowish color [4]. In the superficial infiltrative form, slightly raised above the skin disc-shaped infiltrates of a pinkish-bluish color are determined [5]. The disseminated form is characterized by the appearance of multiple asymmetrically located brownish-brown nodules the size of a pea. A combination of several clinical forms may be observed [6].

The pathological process affects the skin of the face, ears, neck, genitals, inguinal and axillary areas. The general condition does not suffer. Blood tests show lymphocytosis. The disease has a chronic relapsing wave-like course lasting up to three years, sometimes with spontaneous regression [7].

Lymphocytoma is quite difficult to diagnose, since it has clinical similarities with

a number of dermatoses: cutaneous B-cell lymphoma, lymphosarcoma, lymphangioma, leukemides, hypereosinophilic syndrome, sarcoidosis, discoid lupus erythematosus, eosinophilic granuloma of the face, Kimura disease, keratoacanthoma, basal cell skin cancer, tuberculous lupus [8].

Of decisive importance in diagnosis is the pathomorphological examination, which reveals an intradermal lymphocytic infiltrate with an admixture of other immunocompetent cells, separated from the unchanged epidermis by a strip of collagen. Sometimes follicle-like structures with germinal centers and macrophage reaction are observed [9]. Phagocytized material – “polychromatic bodies” – is found in the cytoplasm of macrophages. An increase in the number of vessels with hyperplastic endothelium and proliferation of stromal elements with the development of fibrosis are noted.

Nonsteroidal anti-inflammatory drugs, aminoquinoline drugs, intralesional administration and external use of glucocorticosteroids are used in treatment. In case of infectious predictors of the disease, antibacterial or antiviral drugs are added to the therapy [10].

We present a description of a clinical case of cutaneous lymphocytoma. Patient S., born in 1998, complained of a formation on the right wing of the nose, not accompanied by subjective sensations or changes in the general condition.

Anamnesis morbi: in 2020, a lipoma was observed at the same place, which was removed by radio wave surgery with the formation of a normotrophic scar. From

October 2023 to January 2024, a series of facial photo rejuvenation procedures were performed. In February 2024, a herpes simplex appeared in the area of the scar, after which the right wing of the nose turned red and began to change shape. The pathological process progressed rapidly. She repeatedly consulted dermatovenerologists, but no diagnosis was made, an assumption was made about the malignant nature of this disease and it was recommended to completely remove the skin changes with their subsequent histological examination.

Anamnesis vitae and objective condition are unremarkable. General blood analysis shows minor lymphocytosis (lymphocytes –  $4.22 \times 10^9/l$ ; in the leukocyte formula they make up 56 %). The immunogram also shows lymphocytosis –  $4.26 \times 10^9/l$ , with an increase in the level of B-lymphocytes –  $0.98 \times 10^9/l$ ; 24 %.

Status localis: the skin pathological process is limited, localized on the right wing of the nose, represented by a solitary plaque of a disc-shaped form, 2 cm in size, significantly protruding above the surface of the skin, with clear boundaries, bluish-red-brownish in color, doughy consistency, with a smooth, shiny surface (Fig. 1). Diascopy reveals a yellowish color of the element.

Pathomorphological examination of skin biopsy: the epidermis is unchanged. In the dermis around the skin appendages and vessels, a lymphocytic infiltrate with inclusions of eosinophils, plasma cells, histiocytes is determined, separated from the epidermis by a narrow strip of collagen.



*Fig. 1. Clinical presentation of cutaneous lymphocytoma in a 25-year-old woman*



*Fig. 2. Regression of the pathological process after the therapy*

Based on the presented data, a diagnosis was made: cutaneous lymphocytoma, treatment was carried out: hydroxychloro-

quine 200 mg 2 times a day for two weeks and externally clobetasol cream 0.05 % once a day for a month, after which a complete regression of the skin pathological process was noted (Fig. 2).

The present disease developed in a young woman aged 25 after a series of local effects on the skin: the formation of a lipoma and its removal, photo rejuvenation procedures, herpes infection. The dermatosis was characterized by a rapidly progressing course and was characterized by the presence of a solitary disc-shaped plaque on the right wing of the nose, 2 cm in size, bluish-red-brownish in color, sharply protruding above the surface of the unchanged skin. Complex differential diagnostics were carried out. The final diagnosis was established based on the results of pathomorphological examination, which revealed changes characteristic of lymphocytoma. The treatment led to rapid and complete regression of skin changes.

## CONCLUSIONS

1. Surgical and cosmetic procedures can be triggers in the development of cutaneous lymphocytoma.
2. It is difficult to clinically differentiate cutaneous lymphocytoma from a number of other dermatoses, therefore the diagnosis is established based on the results of a pathomorphological study.
3. This determines the correct choice of treatment measures on which the patient's health depends.

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**Funding.** The study had no external funding.

**Conflict of interest.** The authors declare no conflict of interest.

#### Author contributions:

M.Yu. Kobernik – contributed to the concept and design of the study; prepared the first version of the article.

V.D. Elkin – edited and finally approved the manuscript sent to the editors.

Z.A. Krasilnikova, E.V. Plotnikova – participated in collecting information on the clinical case and processing literary data.

Received: 07/15/2024

Revised version received: 08/01/2024

Accepted: 09/16/2024

Please cite this article in English as: Kobernik M.Yu., Elkin V.D., Krasilnikova Z.A., Plotnikova E.V. A Clinical case of skin lymphocytoma in a young woman. *Perm Medical Journal*, 2024, vol. 41, no. 5, pp. 124–128. DOI: 10.17816/pmj415124-128