

## A Rare Case of Erythema Nodosum

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### Abstract

Erythema nodosum is a panniculitis form, which manifests as painful erythematous, nodular and non-ulcerous inflammation of the subcutaneous fat tissue in the front of the lower and upper extremities. Although it is often idiopathic, erythema nodosum can also be caused by very serious conditions such as tuberculosis and malignancies. Erythema nodosum may precede the diagnosis of lymphoma by months. Therefore, these cases should be evaluated with further examinations. This case report summarizes an unusual presentation of lymphoma.

**Keywords:** erythema nodosum, lymphoma, panniculitis

## INTRODUCTION

Erythema nodosum is a painful disorder of the subcutaneous fat. It is the most common type of panniculitis. It is manifested as erythematous, nodular and non-ulcerous inflammation of the subcutaneous fat tissue in the front of the lower and upper extremities (1-3). In up to 55% of patients, the etiology remains unclear. Streptococcal infection is the most common etiological cause. Other causes are fungal and tuberculosis infections, some types of cancer, pregnancy, rheumatologic diseases, sarcoidosis, inflammatory bowel diseases and certain drugs. Drugs that cause erythema nodosum most often are oral contraceptives and antibiotics.

## CASE REPORT

A 43-year-old female presented to our Adiyaman University Medical Faculty hospital with erythema nodosum manifested as painful red rash on front of her legs. She also complained with generalized muscle pain, morning stiffness, arthralgia, fever and night sweats. On physical examination, there was a nodular, painful

erythematous lesion on front of both legs (Figure 1).

No lymphadenomegaly was detected on physical examination. There was no abnormality except the high levels of the acute phase reactants in laboratory examination. A chest radiograph showed mediastinal shadow (Figure 2). CT of the chest revealed mediastinal lymph node (Figure 2). Patient underwent biopsy of the lesion seen in the chest computed tomography. The biopsy result showed B cell Non-Hodgkin lymphoma.



Figure 1. The image of the erythema nodosum



Figure 2. Radiologic images of the patient

## DISCUSSION

Erythema nodosum is an inflammatory and immunologic panniculitis manifesting in this case as tender, erythematous nodules that distributed symmetrically in the front of lower and upper extremities. Usually it appears as a sudden painful lesion bilaterally distributed. Usually it is located in the shins, ankles, knees and upper extremities (3). It is usually more common in women than in men. It is usually seen in the 2nd and 3rd decade. Erythema nodosum may be associated with wide variety of diseases such as infectious diseases, malignancies, sarcoidosis, certain drugs, pregnancy, inflammatory bowel diseases and autoimmune diseases (4-6). Although it is often idiopathic, it can also be associated with very serious conditions such as tuberculosis and malignancies. Therefore, clinicians should rule out crucial etiological conditions.

Lymphomas arise from the clonal proliferation of lymphocytes and have been divided into two subtypes. These subtypes are Hodgkin and Non-Hodgkin lymphoma. Most of lymphomas are of B cell origin but can also be T cell or naturel killer cell. Lymphomas can arise from any lymphoid tissue located in the body, but also primary organ lymphomas can be seen although extremely rare. The vast majority of patients with Hodgkin lymphoma present with supradiaphragmatic lymphadenopathy. Retroperitoneal and inguinal lymphadenopathies are less common. Approximately one-third of patients present with high fever, night sweats, weight loss or chronic

pruritus. Hodgkin lymphoma may also involve extra nodal sites such as liver, spleen, lungs or bone marrow. Non-Hodgkin lymphomas are lymphoid malignant neoplasms with multiple biological and clinical behaviors. Patients presentations may be painless lymphadenopathy or constitutional symptoms or with involvement of organs. Erythema nodosum is an unusual presentation of lymphomas. Erythema nodosum also may come before the diagnosis of lymphoma by months. Hence, diagnosis of lymphoma should be considered in patients with erythema nodosum (7).

Most cases of erythema nodosum are self-limited. Spontaneous remission usually occurs within a few weeks. Treatment of this condition primarily should be directed to the underlying cause (8).

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