

Could erythema nodosum be a sign of systemic disease – retrospective analysis

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Introduction

Erythema nodosum (EN) is characterized by painful, firm nodules, usually on the extensor surfaces of the lower legs. EN occurs in association with various triggers such as systemic diseases, drugs, pregnancy or it may be idiopathic.

Aim of the study

A retrospective analysis of medical records of patients with EN.

Materials and methods

Records of the patients hospitalized in the Department of Dermatology in Bialystok in the years 2010-2015 were analyzed. Age, sex, comorbidities, epidemiological aspects, clinical course of the disease, additional tests and treatment used were considered.

Results

In the analyzed period 74 patients were hospitalized with EN, 63 females (85%) and 11 males (15%). The age of patients ranged from 9 to 84 years, mean 42. Most of the patients were between 25-50 years old. 40 patients (55%) were overweight or obese. In 49% of people it was the first episode of EN, in 35% the second, 9% third and next. The history of skin lesions lasted from 1 day to 2 years, average 8 weeks. Before hospitalization patients were treated with antibiotics (66%), NSAIDs (25%) and hormonal contraception (15%). The prodrome occurred in 55% cases, the most often was the joints pain (36%), then infections of the respiratory tract (31%), fever (26%), weakness (12%). The most common localization were the extensor surfaces of the lower legs (73%). Most common comorbidities were cardiovascular system diseases (21,6%), thyroid gland diseases (16%), chronic tonsillitis (11%), diabetes mellitus, sarcoidosis (equally 6,7%) and inflammatory bowel diseases (4%). Over 30% of patients had accompanying dermatosis, most often erysipelas and onychomycosis (equally 5,4%). Laboratory tests demonstrated elevated inflammatory markers (71%), positive tests for *M. pneumoniae* (33%), *B. burgdorferi* (36%), *Ch. pneumoniae* (22%), raised value of ASO (29%). Chest X-ray in 41% of cases showed abnormalities, mostly in pulmonary hills. Most patients were treated systemically with antibiotics (74%), NSAIDs (48,6%), glucocorticoids (15%) and all topically.

Conclusions

The analysis confirmed that EN affects more young adults and almost 6 times more often women than men and is related to excessive body weight. Most common causes were drugs and upper respiratory tract infections. Although in up to 50% of cases EN is idiopathic, medical diagnostics should be aimed.