

PROGNOSTIC FACTORS OF PULMONARY SARCOIDOSIS REGRESSION IN THE COURSE OF GLUCOCORTICOSTEROID THERAPY

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Abstract

The aim of the study was an evaluation of the most probable factors of unfavorable prognosis considering the rate of sarcoidosis regression.

According to literature data such factors include: 1) presence of clinical signs of sarcoidosis (respiratory symptoms, fatigue); 2) high density small nodule dissemination in lung parenchyma; 3) lung function disturbances; 4) hypercalcemia.

Materials and methods. We performed a retrospective analysis of clinical, spirometry, computed tomography (CT) data, including lung parenchyma densitometry, and serum calcium concentrations in 80 patients with stage II sarcoidosis, considered cured after the completion of standard glucocorticosteroid (GCS) therapy course. All cases were relatively similar in terms of lung parenchyma lesions morphology: the predominant one was a pattern of small nodule dissemination without atypical findings.

A period of time between a beginning of therapy and clinical cure was considered as an indicator, reflecting the rate of sarcoidosis regression. It was calculated based on retrospective comparison of CT scans, taken each three months of therapy.

Results. It was revealed that one of the factors of unfavorable prognosis regarding the rate of sarcoidosis regression was the presence of high density (> -800 HU) dissemination on CT scans and/or lung function disturbances. The presence of these factors in the debut of the disease slowed down the regression of sarcoidosis by 1,4–1,75 months. The presence of clinical symptoms and hypercalcemia at initial examination had no significant influence on the rate of regression of disease during the course of GCS therapy.

Conclusion. The results may be the basis for the application of more intensive regimens of GCS therapy in patients with pulmonary sarcoidosis with CT signs of high density parenchyma dissemination and / or impaired ventilatory function of the lungs in the onset of the disease. However, from our point of view, the adoption of such a decision is more justified with an increased risk of recurrence of sarcoidosis in patients with high density dissemination and pulmonary ventilation disorders. The study of the frequency of relapses in this group of patients will be the subject of further research.

Key words: pulmonary sarcoidosis, glucocorticosteroid therapy, rate of regression, prognostic factors.

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