

EFFECTIVENESS OF METHOTREXATE IN MANAGEMENT OF PULMONARY SARCOIDOSIS RELAPSES

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Abstract

Relapses are one of most urgent problems of treatment in pulmonary sarcoidosis patients. There have been demonstrated the correlation between the rate of pulmonary sarcoidosis relapses and previous long-term glucocorticosteroid (GCS) therapy. This makes a feasibility of GCS administration in patients with relapsing disease doubtful. Literature data and author's clinical experience considering lower incidence of sarcoidosis relapses after the use of immunosuppressive drugs such as methotrexate (MTX) were the rationale for this study.

Aim: to study the efficacy of MTX in treatment of patients with the relapses of pulmonary sarcoidosis.

Material and methods. We examined 12 patients (5 males and 7 females, 36-54 years of age) with relapses of pulmonary sarcoidosis, revealed within 12 months after successful completion of main course of methylprednisolone (MP) therapy (clinical cure). MTX was prescribed in dose of 15 mg/week under monthly control of white blood cells and platelets count and alanine aminotransferase (ALT) serum level. Therapy has been stopped after the complete cure, confirmed by lung computed tomography (CT). The primary endpoint was the long-term outcomes of MTX use – the rate of repeated relapses during 12 months follow-up period following MTX discontinuation. The control group was comprised of 33 patients (males 14, females 19, 30-58 years of age) with relapses of pulmonary sarcoidosis after completion of GCS therapy, treated with MP at initial dose of 24 mg/day. Therapy has been stopped after the complete cure, confirmed by lung CT. The long-term outcomes were assessed at 6 and 12 months of follow-up. Additionally, incidence of adverse reactions was compared between groups. Exact Fisher's test was used to determine the differences between studied variables.

Results. No significant differences were found in rate of adverse reactions between study groups (16,7 % in MTX vs 21,2 % in MP group). At the same time the rate of repeated relapses was lower in MTX than in MP group (25 % vs 57,6 %, respectively, $p=0,01993$).

Conclusion. Use of MTX 15 mg/week in patients with relapses of pulmonary sarcoidosis was associated with less frequent repeated relapses in comparison with conventional use of MP at starting dose 24 mg/day.

Key words: pulmonary sarcoidosis, relapse, methotrexate, methylprednisolone.