

REFRACTORY SARCOIDOSIS:

DEFINITION, DIAGNOSTIC CRITERIA, PREVALENCE

V. K. Gavrysyuk, E. O. Merenkova, Y. O. Dziublyk, N. D. Morska,
N. V. Pendalchuk, A. I. Yachnik, N. A. Vlasova, O. V. Strafun, O. V. Bychenko

Abstract

Refractory pulmonary sarcoidosis is a variant of sarcoidosis defined as a condition in which glucocorticosteroids (GCS) in maintenance dose less than 10 mg daily (prednisolone equivalent) and methotrexate (MTX) including their combination are not sufficient to achieve clinical remission of the disease.

Aim of study — retrospective evaluation of the prevalence of refractory pulmonary sarcoidosis based on assessment of outcomes of GCS and immunosuppressive therapy in patients with newly diagnosed disease.

Materials and methods. We examined 250 patients with pulmonary sarcoidosis (main group), 106 male (42,4 %) and 144 female (57,6 %), mean age 44 years (22–74). Stage II was diagnosed in 237 (94,8 %) patients, stage III — in 13 (5,2 %). GCS therapy was conducted using methylprednisolone (MP) in 190 patients (Group 1 - GCS) according to statements of National clinical recommendations "Sarcoidosis" (2014). Initial dose of MP was 0,4 mg/kg daily during 4 weeks with subsequent tapering to maintenance dose of 0,1 mg/kg by the end of 6th month. MTX monotherapy (15 mg once a week) was conducted in 60 patients with contraindications or serious side effects of MP (Group 2 - MTX). In case of progression or lack of positive response to GCS (improvement) after 6 months of treatment, patients were switched to combination therapy: MP 12 mg daily plus MTX 10 mg weekly. Patients without contraindications or serious adverse effects of MP, failed on initially prescribed MTX, were also switched to combination therapy. Those cases, in which the progression or stabilization of disease was observed despite 6 months of combined therapy, were considered as refractory. For comparison of categorial data, presented as absolute value and percentage, χ^2 Pearson's test was used. All measurements were bilateral with the level of significance $p < 0,05$.

Results. Resistance to GCS therapy (progression or stabilization on therapy) were observed in 55 (28,9 %) patients; cases of treatment failure were observed much more rarely (7 patients — 11,7 %; $\chi^2 = 7,302$; $p = 0,007$), mainly in cases with macronodular parenchyma lesions. Considering combination therapy outcomes and MTX monotherapy treatment failure among patients with contraindications and serious adverse effects of GCS therapy, a refractory pulmonary sarcoidosis was registered in 27 (10,8 %) patients.

Conclusion. Outcomes of GCS and MTX therapy in patients with newly diagnosed pulmonary sarcoidosis, conducted according to the international and national standards, confirmed the refractory pulmonary sarcoidosis in 10,8 % of cases, which corresponded to foreign literature data.

Key words: refractory pulmonary sarcoidosis, diagnosis, prevalence, methylprednisolone, methotrexate.