INCIDENCE OF PULMONARY SARCOIDOSIS: THE RATE OF NEW CASES DEPENDING ON GEOGRAPHICAL LATITUDE

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Abstract

Pulmonary sarcoidosis, affecting lung parenchyma, in majority of world countries holds the first place in the structure of interstitial lung diseases (ILD). Since 1970th it is observed a continuously growing morbidity and mortality due to sarcoidosis.

In different countries an incidence of sarcoidosis varies from 0,125 to 24,0 new cases per 100 000 population a year; the prevalence of disease is from 1 to 64 per 100 000 population.

Previously conducted surveys failed to demonstrate any relation between the rate of sarcoidosis and ecological factors, industrial exposures, smoking, concomitant diseases. At the same time sarcoidosis epidemiology was influenced by geographical factor: the prevalence of sarcoidosis increased from south to the north. But still the literature data, confirming the role of geographical factor, had not enough statistical power.

In current survey there was studied the correlation between the incidence of sarcoidosis in Eurasia region and mean geographical latitude of country using correlation-regression analysis. The calculated value of correlation coefficient was 0,827 (p = 6,295×10–6). Considering 95 % confidential interval (0,636–0,923) it was possible to suggest moderate correlation between the level of sarcoidosis incidence in each taken country and its geographical latitude.

Key words: epidemiology of sarcoidosis, incidence, influence of geographical factor.

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