

## **SARCOIDOSIS AMONG HOSPITALIZED PATIENTS IN POLAND. A HOSPITAL REGISTER-BASED STUDY.**

M. Bogdan<sup>1</sup>, K. Kanecki<sup>1</sup>, P. Gorynski<sup>2</sup>, A. Nitsch-Osuch<sup>1</sup>, P. Tyszko<sup>3</sup>, A. Barańska<sup>4</sup>, P. Samel-Kowalik<sup>5</sup>

<sup>1</sup> Department of Social Medicine and Public Health, Medical University of Warsaw, 02-097 Warsaw, Oczerki 3, Poland, kanecki@mp.pl

<sup>2</sup> National Institute of Public Health - National Institute of Hygiene, 00-971 Warsaw, Chocimska 24, Poland.

<sup>3</sup> Institute of Rural Health in Lublin, Lublin, Jaczewskiego 2, 20-090, Poland.

<sup>4</sup> Department of Medical Informatics and Statistics with E-learning Lab, Medical University of Lublin, 20-954 Lublin, Jaczewskiego 4, Poland.

<sup>5</sup> Department of Prevention of Environmental Hazards and Allergology, Medical University of Warsaw, 02-091 Warsaw, Banacha 1a, Poland

**Introduction.** Sarcoidosis is an immune-mediated systemic inflammatory disease of unknown etiology, characterized by noncaseating epithelioid-cell granulomas. Majority of patients show granulomas located in the lungs or in the related lymph nodes.

**Objectives:** Study measured the incidence of sarcoidosis, gender distribution and territorial differences among hospitalized patients in Poland in 2008-2015. To the best of our knowledge, this is the first evaluation disease in Poland based on a hospital morbidity database. **Materials and Methods:** Authors conducted a retrospective, population-based study, using hospital discharge records, based on data from a Polish hospital morbidity study, carried out by the National Institute of Public Health. **Results:** The final study group consisted of 47790 hospitalizations of 23097 patients (46.6% females and 53.4% males) - mean and median age of were 45,9 and 51 years, respectively; CI: 45.75 - 45.99; in patients min-max: 1-92 years. Significant gender differences were observed ( $P<0.001$ ) and in the place of residence ( $P<0.01$ ). The average annual incidence rate of sarcoidosis was estimated at 75.1 per million (95% CI: 74.2 - 76.1). Non significant decrease in trend of sarcoidosis incidence (83.9 per million in 2008 vs 74.5 per million in 2015), was observed. During the study period 73 patients died while hospitalized, among them 27 died during first-time hospitalization. **Conclusions:** The presented data may be helpful in comparative studies on the epidemiology of sarcoidosis between European countries. We observed decrease trend of sarcoidosis incidence among hospitalized patients in Poland. Further research into the epidemiology of this systemic inflammatory disease is needed.

**Keywords:** sarcoidosis, incidence, morbidity, hospitalizations, public health, administrative data, Poland.