

## **CO-MORBIDITIES, NO LUNG FUNCTION OR WORKING ABILITY INFLUENCE ON DAILY ACTIVITY IN PATIENTS WITH SARCOIDOSIS.**

Sabina Kostorz<sup>1</sup>, Dariusz Jastrzębski<sup>1</sup>, Marcin Sikora<sup>2</sup>, Aleksandra Zebrowska<sup>2</sup>, Marek Syguda<sup>1</sup>, Damian Stepanik<sup>1</sup>, Hanna Świnder<sup>1</sup>, Renata Wiśniewska<sup>1</sup>, Radosław Gawlik<sup>3</sup>, Dariusz Ziara<sup>1</sup>

<sup>1</sup> School of Medicine with the Division of Dentistry, Department of Lung Disease and Tuberculosis, Medical University of Silesia, 1 Koziółka St. 41-803 Zabrze, Poland

<sup>2</sup> Department of Physiological and Medical Sciences, The Jerzy Kukuczka Academy of Physical Education, Mikolowska Street 72 A, 40-065 Katowice, Poland

<sup>3</sup> Department of Internal Diseases, Allergology and Clinical Immunology, Medical University of Silesia, Katowice, Poland

**Background** Sarcoidosis may affect lung function, working ability, overall mobility, and daily activity. We performed an analysis of clinical settings in patients with sarcoidosis to disentangle its influence on daily Physical Activity.

**Methods** Thirty one consecutive inpatient with sarcoidosis, aged  $46.4 \pm 10.5$ , were enrolled to the study. Clinical data (age, gender, steroid consumption, weight, comorbidities), lung function tests (FEV1, FVC, DLCO), mobility (6MWT) and working ability (WAT, V02max) were estimated and compared with PA. PA assessment was performed using accelerometer, after discharge during consecutive 7 days. The numbers of steps per day and daily energy expenditure of PA were measured.

**Results** Between steroid treated and untreated patients the daily steps count did not differ significantly (6510 vs. 4889). No influence of age, gender or weight on PA was observed. According to number and severity of comorbidities patients were divided into 4 groups (I group - only sarcoidosis, IV group - sarcoidosis with more than 3 comorbidities). Significant differences were observed in PA (7333 vs 5239 vs 4004 vs 3800) depending on comorbidities. No relationships were observed between lung function tests, mobility, working ability and PA.

### **Conclusion**

Physical Activity in sarcoidosis patients depends on comorbidities but not on lung function or working ability.