

INCIDENCE OF LUNG OR MEDIASTINUM ABSCESSES MAY BE RELATED TO ENVIRONMENTAL FACTORS IN POLAND.

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Introduction: Abscesses are circumscribed collections of pus in the lung or mediastinum as a result of a microbial infection, which leads to cavity formation and often a radiographic finding of an air fluid level. Our study provides a recent epidemiological data on lung or mediastinum abscesses in Poland. **Objectives:** The aim of the study was to describe the epidemiology of lung or mediastinum abscesses in Poland in 2019-2016. **Patients and methods:** The authors conducted a retrospective, population-based study, using hospital discharge records with diagnoses of lung or mediastinum abscesses. Incidence rates were estimated 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 14932 hospitalizations of 12049 patients (74,3 % males and 25,7 % females). Among all hospitalizations the mean and median age was 56.8 and 59 years, respectively. Patients were hospitalized with diagnosis of abscess of lung and mediastinum (3%), gangrene and necrosis of lung (3%), abscess of lung with pneumonia (58%), abscess of lung without pneumonia (26%), abscess of mediastinum (10% of all hospitalizations) The average annual incidence of lung abscess was 42.7/1.000.000 (95% CI 40,6 - 44.8) The average annual incidence of mediastinum abscess was 5,97/1.000.000 (95% CI 5,42 - 6,52). The incidence rate of all cases of lung or mediastinum abscesses varied significantly between urban and rural regions (59% vs 41 %, $P<0.02$).

Conclusions: The incidence of lung or mediastinum abscesses be related to environmental factors.

Keywords: environmental factors, incidence, morbidity, hospitalizations, public health, administrative data, rare disease, Poland.