

European Respiratory Society Annual Congress 2012

Abstract Number: 3684
Publication Number: P2484

Abstract Group: 10.1. Respiratory Infections

Keyword 1: Infections **Keyword 2:** Sepsis **Keyword 3:** No keyword

Title: Risk factors predicting mortality in patients with lung abscess

Dr. Shaista 24642 Ghazal mh_shaista@hotmail.com MD , Dr. Nusrat 24643 Idrees nusratidrees@yahoo.com MD , Dr. Ashok 24644 Kumar ashoka_pj@yahoo.com MD and Prof. Nadeem 24645 Rizvi rizvi_n@hotmail.com MD . ¹ Chest Medicine, Jinnah Post Graduate Medical Centre, Karachi, Sindh, Pakistan .

Body: Introduction Lung abscesses continue to express high mortality in patients hospitalised with the disease. Objectives To identify the factors associated with increased mortality in patients diagnosed with lung abscess. Methods Retrospective study performed via hospital records on patients admitted with lung abscess between January 2009 and January 2011 at the largest state-owned tertiary care centre in Karachi, Pakistan. Out of 41 patients hospitalised, 17 could not survive and were evaluated for factors to determine association with heightened mortality. Results Mortality due to lung abscess stood at 41.46% (17/41). Adult male patients were found to have a higher mortality with 13/17 (76.5%) expired patients being male. Majority (21/41, 51.2%) of the cases belonged to the 41-60 year old age group with highest mortality (9/17, 52.9%). Number of patients with blood sugar levels of >200 mg/dl who succumb to disease was 9/17, 52.9%. Patients with history of smoking, diabetes mellitus, and alcohol intake expressed mortality rates of 70.6 %, 58.8%, and 17.6% respectively; while 29.4% of the mortalities were positive for *Pseudomonas aeruginosa* on sputum culture. A significant association was found between elevated mortality and low haemoglobin levels at time of admission; mortality was 76.5% (13/17, $p < 0.013$) in patients with Hb between 7-10 mg/dL. Conclusions The risk factors involved with heightened mortality included male gender; older age; history of smoking, and diabetes. High blood sugar levels and detection of *Pseudomonas aeruginosa* on sputum cultures were also implicated. Hb level of <10 mg/dL was a statistically significant predictive factor for increased mortality.