European Respiratory Society Annual Congress 2012

Abstract Number: 3935 Publication Number: P590

Abstract Group: 1.13. Clinical Problems - Other

Keyword 1: Airway management Keyword 2: Spirometry Keyword 3: COPD - diagnosis

Title: Evaluating airway obstruction in patients admitted to general medicine wards by bedside spirometry

Dr. Pavan 23236 Yadav jks@sify.com¹, Prof. J.K. 23237 Samaria jks@sify.com MD² and Dr. Moosa 23238 Hussain jks@sify.com³. ¹ Dept. of Chest Diseases, Instt of Medical Sciences, Banaras Hindu University, Varanasi, UP, India, 221005 ;² Dept. of Chest Diseases, Instt of Medical Sciences, Banaras Hindu University, Varanasi, UP, India, 221005 and ³ Dept. of Chest Diseases, Instt of Medical Sciences, Banaras Hindu University, Varanasi, UP, India, 221005 and ³ Dept. of Chest Diseases, Instt of Medical Sciences, Banaras Hindu University, Varanasi, UP, India, 221005 and ³ Dept. of Chest Diseases, Instt of Medical Sciences, Banaras Hindu University, Varanasi, UP, India, 221005 and ³ Dept. of Chest Diseases, Instt of Medical Sciences, Banaras Hindu University, Varanasi, UP, India, 221005 and ³ Dept. of Chest Diseases, Instt of Medical Sciences, Banaras Hindu University, Varanasi, UP, India, 221005 .

Body: Study objectives: Airway obstruction is found to coexist with other medical conditions. This study attempts to assess airway obstruction in patients admitted in general medicine wards. Methods: A cross-sectional study of 52 patients admitted to medicine ward of a tertiary hospital was carried out. Bed-side spirometry was performed in each of these patients after taking consent and recording a detailed history. Results: A remarkable 52% of the patients were found to have airway obstruction (FEV1/FVC<70%) on performing spirometry, including 11.5% with very severe (FEV1< 30% predicted), 17.3% with severe (FEV1 30%-49%), 11.5% with moderate (FEV1 50%-69%) and 9.6% with mild (FEV1>70%) obstruction respectively. A diagnosis of obstructive airway disease was present only in 26% of these patients at the time of admission. A considerably higher prevalence of airway obstruction than average was observed in patients admitted for respiratory (70%), cardiac (62.5%) and neurological (58.8%) disorders, while a lower prevalence was seen in those with nephrological (40%), haematological (0%) or other (22.2%) conditions. No patient was additionally diagnosed with airway obstruction during the hospital stay and only 26% of patients with airway obstruction received bronchodilator therapy. Conclusions: Airway obstruction co-existing with other medical condition stays grossly under-diagnosed. A routine bed-side spirometry performed on hospitalized patients could be a useful tool for detecting and treating airway obstruction.