Abstract Group: 1.6. General Practice and Primary Care

Keyword 1: COPD - management  Keyword 2: Comorbidities  Keyword 3: Primary care

Title: Comorbidity, hospitalization and mortality in COPD: Results from a longitudinal study

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Body: Objective To evaluate comorbidity, hospitalization and mortality in COPD patients. Design Prospective longitudinal study. Participants 95 COPD patients admitted consecutively to a Respiratory Medicine ward from 1999 to 2000 for an acute exacerbation of the disease and followed up from the date of discharge to september 2007. Results Mean follow up period of 6 +/- 1.4 yrs. Hypertension the most common comorbidity (64.2%), followed by chronic renal failure (26.3%), diabetes mellitus (25.3%), cardiac diseases (22.1%) and peripheral arterial vascular diseases (17.9%). 359 hospitalizations with the leading cause being exacerbation of COPD (41.2%); cardiovascular disease (34.4%); COPD exacerbation concomitant with an other acute disease (8.4 %). 19 deaths (20%) by the end of follow up with causes being mostly cardiovascular (13 patients, 13.7%). Survival analysis through Cox regression showing mortality risk depending on age, current smoking, pO2, Charlson index, presence of ischemic heart disease and lung cancer as comorbidity. Multivariate logistic regression analyses showing number and length of hospital admissions depending on Charlson index and degree of dyspnoea. Presence of diabetes as comorbidity independent predictor of longer hospital admission. Conclusions High prevalence of comorbidity, particularly cardiovascular disease being the main cause of death. Level of frailty depending on comorbidities of COPD geriatric hospitalized patients related to their prognosis. Implementation of aggressive strategies to prevent or treat comorbidities necessary for a better care of patients, together with the correct management of the respiratory disease.