Title: Severity and outcome of community acquired pneumonia in asthmatic patients

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Body: Introduction : Despite the wide knowledge on viral exacerbations of asthma, limited information is available about bacterial infections. We investigated prevalence, clinic characteristics and aetiology of community-acquired pneumonia (CAP) in asthma. Methods : We prospectively studied 4107 CAP patients over a 12-years period; of these 167 were asthmatic. Results : Asthmatics showed younger age (59±19 vs 66±20), less males (31% vs 63%) and less active smokers (30% vs 57%). Moreover, they had less renal (asthma-CAP: 2% vs CAP: 6%) and neurological (12% vs. 19%) comorbidities but more frequent use of previous inhaled corticosteroid (54% vs 16%) and antibiotics (31% vs 24%)(p<0.05 each). In comparison with non asthma-CAP, asthmatics showed at admission more expectoration, dyspnea and pleuritic pain, higher leucocytes but a lower PSI. No differences were observed in the microbiology, being S. pneumoniae the most frequent isolate. Clinical course and outcomes were similar in both groups excepting the rates of hospitalization and renal failure, both less frequent in asthma.

Conclusion : Asthmatics were younger but more symptomatic. Despite lower PSI, likely due to age, asthmatics had similar outcomes to non-asthmatic patients. The potential benefit of younger age seems counterbalanced by more severe clinical presentation resulting in similar mortality.