Abstract: A comparison of the frequency of cough with laughter in asthmatic and non-asthmatic patients

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Body: Cough is a frequent symptom in asthmatic patients. Cough may be induced by typical asthma triggers such as allergens, exertion or change in atmospheric temperature. This study investigates the symptom of cough with laughter as an asthmatic symptom. Patients attending a general adult respiratory clinic were routinely asked if they experienced cough with laughter. Seventy-four consecutive patients with a single respiratory diagnosis were included. The patients were divided into two groups—patients with asthma and those with another respiratory diagnosis. The asthma group had forty-three patients with a mean age of 57.7 years, twenty-seven were female and sixteen male. The non-asthma group had thirty-one patients with a mean age of 63.9 years, sixteen were male and fifteen female. In this second group their diagnoses were chronic obstructive pulmonary disease in eleven, pulmonary fibrosis in eight, sarcoidosis in five, bronchiectasis in two, hyperventilation in two and one each of carcinoma of bronchus, tuberculosis and sleep apnoea. In the asthma group forty-two of the forty-three patients had the symptom of cough with laughter. In the non-asthma group one of the thirty-one patients had the symptom of cough with laughter. The symptom of cough with laughter is highly significantly associated with a diagnosis of asthma compared to other respiratory diagnoses (p<0.0001) and has a 97.6% sensitivity and a 96.8% specificity as an asthma symptom in this study.