05.02 - Monitoring airway disease

39072
How respiratory symptoms impact asthma-related quality of life in severe asthmatics

Asthma, Quality of life, Severe asthma

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Introduction: No study has ever explored the individual impact of the five main asthma symptoms (dyspnea, wheezing, chest tightness, cough and airway secretion) on asthma health-related quality of life (HRQL) in severe asthmatics.

Objectives: The main objective was to assess the association between asthma symptom intensity and asthma-HRQL and its 4 dimensions.

Methods: We conducted a cross-sectional study on severe adults (≥18 years) asthmatics recruited from the Liège University Hospital Asthma Clinic (Belgium) prior to initiation of biologics (n=143). Asthma-HRQL was measured by the mini asthma quality of life questionnaire (AQLQ). The intensity of the symptoms was measured by five-point Likert scales. Multiple linear regression analyses (MLRA) were performed to identify the symptoms independently associated with global AQLQ and its dimensions.

Results: The mean age of our patients was 52(±16) years and 64%(92) were female. The mean BMI was 28(±5.3). The mean baseline % predicted FEV1 and % FEV1/FVC were 70%(±19) and 70%(±12) respectively. Global AQLQ mean was 4(±1.4) and asthma control test (ACT) mean was 13(±5.5). Each of the 5 symptoms was significantly correlated with global AQLQ. After adjusting for age, sex, BMI, FEV1 % predicted, FEV1/FVC % and ACT, MLRA revealed that only dyspnea was still significantly associated with global AQLQ ($p<0.05$) and its activity dimension ($p<0.0001$) while cough and airway secretion associated with the emotive dimension ($p<0.01$) with cough also associating with the environmental dimension ($p<0.01$).

Conclusion: Dyspnea is the main symptom associated with global AQLQ in severe asthmatics, but each symptom has a variable impact on the different AQLQ's dimensions.