ASTHMA AND RISK OF CARDIOVASCULAR EVENTS: A RETROSPECTIVE STUDY

P. Granda[1], E. Villamañán[2], L. de las Vecillas[3], D. Laorden[3], VL Collada[2], C Mateos[2], A. Hoyo[2], L. García[2], R. Álvarez-Sala[3], A. Herrero[2].

[1]Hospital Central de la Defensa Gómez Ulla, Pharmacy Department. [2]Hospital Universitario La Paz, Pharmacy Department. [3] Hospital Universitario La Paz, Pneumology Department. Madrid, Spain.

BACKGROUND AND IMPORTANCE

Asthma non-respiratory comorbid conditions include cardiovascular disease; indeed, asthma has been linked with increased risk of cardiovascular events (CVE) although its prevalence varies between studies and robust evidence of this relationship is limited.

PURPOSE

The aim of this study was to identify and assess cardiovascular disease risk for severe asthma patients.

MATERIAL AND METHODS

Retrospective cohort study involving patients followed-up by the Severe Asthma Unit of a tertiary care hospital in Spain.

Demographic variables, respiratory comorbidities and cardiovascular risk factors.

Respiratory function variables and laboratory parameters.

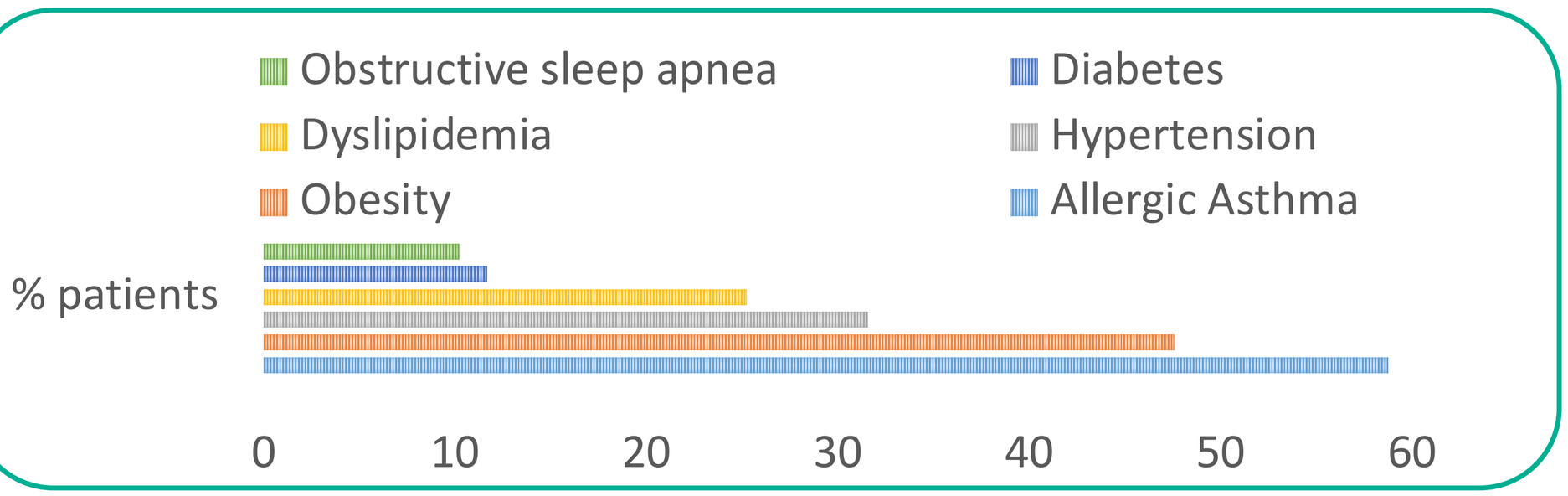
Treatment with biologics and concomitant therapies for asthma and antihypertensive medication.

Multiple logistic regression model

Clinical variables in severe asthma patients related to suffering CVE.

Patients with a prior history of CVE before the asthma diagnosis were excluded.

RESULTS



n= 206
65.6% female
57±18 years

23 (11%) suffered a CVE
Hypertension (OR=2.717, p=0.026),
Dyslipidaemia (OR=2.717, p=0.026
COPD (OR=5.358, p=0.003)

Inhaled corticosteroids (OR=0.187, p=0.007)
Blood eosinophil count (BEC) >150 cells/μL (OR=0.225, p=0.025)

CONCLUSION

Risks of CVE were increased in asthma patients with hypertension, dyslipidaemia or COPD. A lower risk of CVE was observed in patients on inhaled corticosteroids and, unexpectedly, in those with FEV1<80% and BEC>150 cells/μL. Nonetheless, these results must be interpreted with caution as the design of the current study is subject to limitations.

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