Asthma in The Elderly: The Sum is Greater Than the Parts

Asma no Idoso: O Todo é Maior do Que as Partes

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Dear Editor,

Asthma is a common, chronic respiratory disease affecting 1% – 18% of the population in different countries[1] and, despite being hard to accurately measure in the elderly population, is estimated to have a prevalence ranging from 4.5% to 12.7%.[2–5] Nevertheless, it remains underdiagnosed and undertreated.[2,4] Asthma in the elderly population is commonly classified according to the age of asthma diagnosis. "Late onset" asthma is first diagnosed after the age of 65[3] and is often a more severe phenotype, with less symptom free days and a higher requirement for oral corticosteroids.[3]

We did a retrospective analysis of patients referred to a Respiratory Allergology consultation at the Hospital Geral, Centro Hospitalar Universitário de Coimbra, from 2011 – 2016, aged 65 or older, diagnosed with asthma and with symptoms onset in the previous 10 years. We excluded patients with previously documented asthma and symptoms starting before the age of 55. The diagnosis of asthma was established based on clinical presentation and all available test results. Statistical analysis was performed using the IBM SPSS® statistical software, version 25. The variables were described with mean and standard deviation.

We included 55 patients with mean age 70.4 ± 4.3 years, 71.4% were female. Two patients had a smoking history (both less than 10 pack-years). Regarding symptoms, 82.9% referred cough, 77.1% wheezing and 71.4% dyspnoea and 34.3% had nocturnal complaints. Cardiovascular comorbidities were common with hypertension being present in 54.3%, dyslipidaemia in 25.7%, heart failure and atrial fibrillation in 17.1%. Other important comorbidities included rhinosinusitis, found in 51.4%, psychiatric disorders in 31.4%, gastro-oesophageal reflux in 20.0%, thyroid disease in 11.4% and obesity in 31.4%.

Allergen sensitization was documented in 20.0% (RAST tests), with dust mite sensitization being the most common. Total serum IgE was increased in 20.0% (average of 244.6 IU / mL ± 590.7). Fifty-four out of the 55 were able to perform lung function testing. Obstructive pattern was found in 91.2% with reversibility in 29.0% (mean FEV1 of 63,2% ± 14.3) and airway hyperresponsiveness in the remaining patients (methacholine challenge testing); average DLCO of 97.84% (± 22.8); FeNO increased in 44.1% (mean 44.8 ± 45.3 ppm) and eosinophilia in 29.0% (average of 257.4 eosinophil cells / uL ± 270.1). In terms of therapy, 5.7% were under triple inhalation therapy (ICS, LAMA and LABAs), 60% with ICS/LABA and 5.7% ICS alone and, when applying control questionnaires (CARAT® and ACT® simultaneously), 62.9% were not controlled with the current medication.

In conclusion, this condition is more prevalent in women and there is a higher prevalence of comorbidities in this population, which often make it difficult to truly assess symptoms and correctly manage the disease.[2] In addition, as comorbid conditions are common in this population, polypharmacy is frequent, thereby increasing the risk of drug interactions and side-effects of medications.[2] Also, due to co-occurring physical and/or cognitive impairment, it is hard to perform important tests that help to clarify the diagnosis when there is a plethora of clinical manifestations. Despite this, we were able to have almost all patients performing lung function tests. Other facts to consider is that bronchodilator responses are known to be less marked in the elderly, perhaps as a consequence of the aging effects attributed to the emphysema-like state of the senile lung[5] and methacholine responsiveness has been reported to increase with aging, further complicating the assessment.

Atopy is also less frequent in this age group,[5] as we also observed and treatment is frequently suboptimal, leading to a poorer control of asthma in these patients, possibly by misinterpreting the symptoms as normal aging manifestations, but also for fear of side effects and interactions. As asthma control is very important for quality of life, an additional effort has to be made in order to better manage this condition.

We think our study population, since it was gathered using real life data, accurately represents the patients that all clinicians frequently deal with in daily practice and all the challenges that we all face. It is, therefore, very important to raise awareness to the peculiarities of older asthmatic patients.

REFERENCES

1. Global Initiative for Asthma, Global Strategy for Asthma Management and Prevention. 2018. [accessed 2019 Apr 26]. Available from: https://ginasthma.org/wp-content/uploads/2018/04/wms-GINA-2018-report-V1.3-002.pdf.
2. Yáñez A, Cho SH, Soriano JB, Rosenwasser LJ, Rodrigo GJ, Rabe KF, et al. Asthma in the elderly: what we know and what we have yet to know. World Allergy Organ J. 2014;7:8.
3. Gillman A, Douglass JA. Asthma in the elderly. Asia Pac Allergy. 2012,2:101–8.
4. Battaglia S, Benfante A, Spatafora M, Scichilone N. Asthma in the elderly: a different disease? Breathe. 2016;12:18–28.
5. Hanania NA, King MJ, Braman SS, Saltoun C, Wise RA, Enright P, et al., Asthma in the Elderly: Current Understanding and Future Research Needs: A Report of a National Institute on Aging (NIA) Workshop. J Allergy Clin Immunol. 2011;128:S4–24.

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