EDITORIAL

The pathway towards asthma control

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In the last decade, the main asthma guidelines moved from treatment of patients according to disease severity to disease control-guided management.[1] This was a substantial change in everyday clinical practice as the concept of asthma control is wider than that of severity. It encompasses 2 different components, which should be achieved by means of asthma treatment, namely, the "current clinical control" and the reduction of "future risk" of exacerbation or of disease progression.[2] Despite this more holistic view of asthma management and the dissemination of international guidelines, asthma control is still insufficient and a real and crucial problem for respiratory physicians and doctors treating asthma: a survey conducted among 8000 European patients with asthma revealed that, in real life, only 20% of them had controlled asthma[3]; similar findings were reported by both epidemiological[4] and clinical studies.[5,6]

The lack of asthma control has been put in relation with different aspects, many of which can be removed or at least reduced so that they do not influence disease control any more: poor adherence to treatment, which is often linked to inability to correctly use inhaler devices; comorbidities[6,7] such as rhinitis, nasal polyposis, obesity, or gastroesophageal reflux; and other features such as female sex, older age, low educational level, and smoking.[8]

In such a complex setting, the possibility to have easy-to-assess and point-of-care biomarkers able to identify lack of current control and predict high future risk could be an important achievement for the daily practice of respiratory physicians. Many biomarkers have been studied, and only a few of them gave satisfying results: exhaled nitric oxide, for example, was correlated with asthma control only in corticosteroid-naive patients but not in regularly treated ones[6,9-11]; the nasal concentration of nitric oxide, conversely, has been reported to be inversely correlated with asthma control,[6,11] reflecting the role of concomitant sinonasal conditions (particularly nasal polyposis) in worsening asthma; finally, we recently showed that the degree of response to a short-acting β_2-agonist agent (salbutamol), in terms of improvement of forced expiratory volume in 1 second, is correlated with poor asthma control, suggesting that bronchodilation test may give additional information on asthma control level.[5]

Another important issue possibly affecting asthma control is the possibility of a persistent uncontrolled inflammation in the peripheral small airways, which should therefore be targeted by inhaled drugs (corticosteroids with or without associated bronchodilator) released by adequate devices.[12]

The article by Rogala et al[13] published in the present issue of *Polish Archives of Internal Medicine* (*Pol Arch Intern Med*) has the strength to be a large real-life study (involving almost 6000 patients with asthma) highlighting that following a regular follow-up, with proper adjustments of the treatment, may result in an improvement of "current asthma control" and in a reduction of exacerbations and therefore in a reduced "future risk": in a single concept, improving the overall asthma control. Moreover, this study confirms that obesity, older age, and smoking are negatively associated with asthma control, therefore implicitly stressing that a better lifestyle that includes the maintenance of ideal weight and smoking cessation could significantly improve the overall asthma control.

Finally, Rogala et al[13] described that the significant improvement in asthma control was obtained after switching from traditional inhaler devices (ie, traditional metered-dosed inhalers or dry-powder inhalers) to a newer one (Modulite®) releasing extrafine particles of the drugs that can more easily reach and target the small airway, therefore covering the gap that the other inhalers have. This combined approach (the regular follow-up of asthmatic patients plus the use of extrafine-particle inhaled corticosteroid/long-acting β_2-agonist combination) could be really a winning strategy in achieving optimal asthma control for our patients.

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