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LETTER TO THE EDITOR

Classification of asthma severity: Severe/not severe asthma or mild/moderate/severe asthma?

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To the Editor,

Following a confirmed diagnosis, the main therapeutic approaches for the majority of chronic diseases involve an initial assessment of severity to determine the level of care required. This is more complex for asthma due to its natural history, variability in symptoms and signs, and different phenotypes and endotypes (1). Treatment can be started by considering the treatment steps according to the frequency of the initial symptoms and functional parameters. However, it refers only to the initial severity rather than reflecting the severity of the disease in general. Currently, asthma severity is evaluated retrospectively, according to the step of treatment required to control exacerbations and symptoms (2-4). Asthma severity is not stable, and it can change over months or years. A step-down approach should be adopted to find the minimum level of effective treatment that controls the individual's symptoms. Severity should be reassessed if asthma is controlled for several months with minimal effective therapy (2-4). According to the GINA report, asthma severity is classified as mild-moderate-severe asthma.

Mild Asthma: It is defined as well-controlled asthma with step 1 or step 2 therapy [inhaled corticosteroid (ICS) + formoterol as needed or short-acting β2 agonist (SABA) + ICS or regular ICS or regular leukotriene receptor antagonist]. In the GINA report, mild intermittent asthma and mild persistent asthma are no longer distinguished and both are considered mild asthma because it has been stated that this ancient distinction is completely arbitrary and not based on evidence (2). The definition of mild intermittent asthma is no longer used, based on an unproven assumption that those with two or

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fewer symptoms per week would not benefit much from ICS.

Moderate Asthma: It has been used to describe asthma that is well controlled with step 3-4 therapy [e.g., low or medium dose ICS + long-acting β2 agonist (LABA)].

Severe Asthma: Defined as uncontrolled asthma or deterioration of asthma control when high-dose therapy is reduced despite adherence to high-dose ICS + LABA therapy, despite treating factors contributing to asthma being uncontrolled. As can be understood from this definition, the diagnosis of severe asthma is made retrospectively.

However, what is important here is that it is very difficult to define mild asthma and moderate asthma. Patients with mild asthma can also have attacks and these attacks can be fatal (2).

For this reason, we believe that it would be a more pragmatic definition to name patients as "non-severe asthma" rather than as mild asthma at this stage because although it is speculative;

- Classification as mild asthma can provide patients with a sense of comfort and may lead them to underestimate their asthma and has the potential to cause adjustment problems.
- There may be a potential for the physician to underestimate the disease in a patient with a diagnosis of mild asthma.
- Although it is evaluated retrospectively and diagnosed as mild asthma based on the minimum treatment step that controls asthma, mild asthma may have the potential to evolve into moderate or severe asthma in the future.
- For all these reasons, we believe that it would be more appropriate to use the classification of non-severe asthma instead of mild asthma.

The definition of moderate asthma means that the asthma is well controlled with step 3-4 treatment, that the step cannot be decreased, or there is no need to increase the step. In other words, the diagnosis of moderate asthma should be made retrospectively after a period of follow-up. However, since the severity of asthma is not constant, it does not seem possible to identify this group. Patients in this group may also have the potential to regress to mild asthma, or progress to severe asthma.

As emphasized in the definition of severe asthma, the deterioration of asthma control when the ICS dose is reduced in high-dose ICS + LABA treatment means that steps cannot be reduced in this group and the treatment will be continuous. Therefore, due to its stability, severe asthma can be defined more clearly. However, with biological treatments, doses of oral corticosteroids (OCS) and ICS have begun to be reduced in severe asthma (2). With the possible immunomodulatory effect of biologics, there may be a potential for severe asthma to turn into non-severe asthma in the future. On the other hand, it is known that asthma control deteriorates after discontinuing biologics in most patients, although they may be used as add-on therapy for a certain period (2).

As a result, we think that classification as mild or moderate asthma would not be appropriate to limit this dynamic process to these definitions because the severity of asthma can vary.

Since severe asthma is persistent, we believe it would be a more logical approach to categorize asthma severity as severe and non-severe asthma, at least in clinical practice.

After confirming the diagnosis of asthma, ensuring drug adherence and good inhaler use techniques, treating comorbidities, and excluding triggers, just as with severe asthma, mild/moderate asthma should be classified retrospectively according to the minimal treatment step that controls asthma in studies.

Additional research is required to substantiate this novel viewpoint that we developed to rethink how asthma is classified.

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