



Action of immunobiologics in asthma remission

Ação dos imunobiológicos na remissão da asma

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Asthma is a syndrome of high prevalence and morbidity, which has a substantial social and economic impact and can even be fatal. In this context, several organizations and medical societies have developed consensus statements and guidelines for the optimal approach to asthma, among which we highlight the Global Initiative for Asthma (GINA) developed by the World Health Organization. GINA promotes several actions with the aim of improving asthma management while minimizing morbidity resulting from the disease and the risk of premature death, which would enable patients to lead a productive and fulfilling life.¹

There has been a clear improvement in the approach to and management of asthma in recent decades. Statistics on hospital admissions for asthma in the Brazilian Unified Health System, responsible for the care of approximately 70% to 75% of the Brazilian population, show a drop in the admission rates since 2000, when there was a peak of 397,000 hospitalizations. Currently, there are less than 100,000 hospitalizations for asthma per year, corresponding to a 75% reduction. Factors that may have contributed to this decrease in morbidity include the development and implementation of consensus statements and care programs for patients with asthma in Brazil, including

the availability of medications, especially inhaled corticosteroids. However, already-initiated actions need to be improved and made less heterogeneous in the different regions of the country, given that approximately 2000 patients still die of asthma² per year.

In this issue of the *Arquivos de Asma, Alergia e Imunologia*, Mello L.M. and Cruz A.A. analyze the structure of the Brazilian health care system and discuss key aspects of integrated care for asthma.³ Also in this issue, Urrutia-Pereira M. and Solé D. present a summary of the Lancet Countdown South America report, the result of a multidisciplinary academic collaboration between academic institutions and South American health agencies from 12 countries, which was published by Hartinger et al. (2023). This study is a wake-up call, as it publishes the results of the survey on climate change and its effects on human health in South America, highlighting the effects on the respiratory system. Being aware of these results is the first step to implementing public health policies, preferably in a preventive setting.⁴

In parallel with the improvement in asthma treatment and the development of new drugs, the goals of this treatment have also been improved.

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The first goal used to be disease control and then prevention of future risks associated with asthma: exacerbations, lung function loss, and adverse reactions to treatment.^{1,5} Over the past decade, the goal of the treatment of chronic diseases that have periods of exacerbation has shifted to induction of sustained remission whenever possible or, when this goal is unachievable, attainment and maintenance of the lowest disease activity. This concept was first established in the treatment of rheumatoid arthritis, with a change in treatment from corticosteroids to disease-modifying antirheumatic drugs, including more recently biologics for the treatment of more severe cases.⁶

In 2020, the first results were published from a project aiming to reach a consensus definition of asthma remission and to make it the main treatment goal.⁷ The idea is for the project to be continuous and interactive. Regarding remission, patients can be divided into 4 groups: clinical remission on and off treatment and complete remission on and off treatment (Table 1). In clinical remission, patients must be asymptomatic and without exacerbation for 12 months. Patients may be using medication, including high doses, but with no use of systemic corticosteroids. Lung function should preferably be normal, but this may not be achievable for patients with long-term disease, receiving inappropriate treatment, or experiencing airway remodeling. Some authors argue that patients with lung function stabilization, with values close to normal, may be considered in

remission.⁷ Other authors consider an improvement of 100 mL in FEV₁ in relation to pre-treatment optimization values a remission criterion.

Reanalysis of several clinical trials that proved the efficacy and safety of monoclonal antibodies in the treatment of severe uncontrolled asthma has shown that these biologics help patients achieve clinical asthma remission. An analysis of the German registry of patients with severe asthma showed that the group of patients receiving a monoclonal antibody had better rates of good response to treatment (61.4%) and clinical remission (37.6%) than the group not receiving a biologic (34.8% and 17.2%, respectively).⁸

We have all come across a recurring question from patients: can asthma be cured? We need to be careful with the answer and explain that, although we cannot talk about a cure, the goal of treatment is to achieve disease remission. Once this has been made clear, the patient will be more likely to participate and adhere to treatment, increasing the chances of success. It is important to highlight that asthma remission does not mean asthma cure, and that being in remission does not completely eliminate the risk of a severe and even fatal exacerbation of the disease. From our first classes on asthma, we learn that the treatment of the disease begins with patient counseling and education, and that the patient must understand the difference between maintenance therapy and treatment of attacks, being able to manage both situations, including a written action plan.

Table 1

Asthma remission (the patient must remain in this condition for 12 months and there must be patient/physician agreement regarding disease remission)

	On treatment / Off treatment
Clinical	Clinical status (asymptomatic, no exacerbations; ACT, ACQ), pulmonary function test (stable, normal, or close to normal), no systemic corticosteroids
Complete	Normalization of blood eosinophil counts, FeNO, nonspecific bronchial provocation test

Asthma remission is an ambitious goal, but it is crucial to fully restore health in our patients, enhancing patient empowerment and quality of life.

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