

EDITORIAL

REQUIEM FOR CHROMONES?

The development of disodium cromoglycate at the end of the 1960s (1) constituted a true landmark in the treatment of asthma (2) and subsequently of allergic rhinitis and conjunctivitis. The efficacy of this drug in the prevention of crises and the possibility, in many patients, of avoiding the use of systemic corticosteroids, which have more than a few undesirable effects, made cromoglycate a first line treatment for asthma, above all cases of mild or moderate asthma. With these indications, those who derived the most benefit were children since at the beginning the disease is characterized by its lesser severity; what complicate the course of the disease are repeat attacks, due to the persistence of the underlying inflammatory reaction. Investigation into the product's mechanism of action at that time focussed on inhibition of the release of the effector cell mediators, mastocytes. The concept of inflammation as a pathogenic mechanism of asthma was still in the process of being developed.

The subsequent release onto the market of a similar product, sodium nedocromil, which is indicated in the same patients and has slightly greater efficacy, more than anything else improved compliance as it required fewer doses per day than cromoglycate (3). Both products' mechanism of action became better known and consisted of preventing mediator release by blocking chloride channels, thus stabilizing mastocytes and inhibiting eosinophil activation and the resulting release of inflammatory mediators (4). Thus, the anti-inflammatory action attributed to these drugs should rather be understood as prevention of inflammation, which accounts for their efficacy in the prevention of attacks before the inflammatory reactions becomes persistent in the bronchial mucosa. The absence of deterioration in respiratory function in patients with mild (infrequent episodes) or moderate asthma (frequent episodes) demonstrates the need to prevent attacks rather than reduce inflammation (5). The indications for both chromones are uncontroversial (5-9) even though in recent times, some sponsored studies, have stressed the importance of the early administration of anti-inflammatory drugs, above all inhaled corticoids, which have more marked adverse effects and which are indicated as second- or third-line drugs in the most commonly used therapeutic protocols (5, 10, 11).

The way in which chromones act suggests their place in the therapeutic scheme of asthma, that is, before the inflammation becomes consolidated; when this happens recovery of bronchial permeability is compromised, as evidenced by the reduced efficacy of β -agonists with only a slight increase in FEV_1 and FME_{25-75} after inhalation. It is at this point that inhaled corticoids are indicated (12). Because onset of the disease usually occurs in childhood, chromones are most indicated in childhood asthma. The greatest

problem lies in the need to inhale 3-4 doses of cromoglycate per day, although in practice, once the process is controlled 2-3 doses per day are required. With nedocromil, fewer doses are required and the efficacy of this drug is practically identical. Therefore, early diagnosis is imperative, even more so if there is confirmation of an allergen causing the process as etiological treatment with immunotherapy can then be given at the same time as chromone administration.

Despite studies that do not find these drugs to be effective (13), daily experience, as well as the above-mentioned favorable reports, support their use. This view has been expressed in several communications that have recently appeared in the Argentinian Allergy Network after doubt had been shed on their usefulness. Moreover, experience demonstrates their effectiveness in the control of refractory asthma in small children, with aerosol administration of cromoglycate. Their utility is further demonstrated in the prevention of exercise-induced asthma, as well as in other processes such as allergic rhinitis and conjunctivitis. It is a shame that the pressure put on physicians in favor of the early use of inhaled corticoids is leading to the disappearance of these drugs that have proven to be so useful in the prevention of asthma attacks, are free of adverse effects and are much cheaper.

F. Muñoz-López

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