Early View

Correspondence

It is time to end our love affair with short-acting β2-agonists in asthma? YES

Luis. J. Nannini

Please cite this article as: Nannini LJ. It is time to end our love affair with short-acting β 2-agonists in asthma? YES. *ERJ Open Res* 2022; in press (https://doi.org/10.1183/23120541.00555-2022).

This manuscript has recently been accepted for publication in the *ERJ Open Research*. It is published here in its accepted form prior to copyediting and typesetting by our production team. After these production processes are complete and the authors have approved the resulting proofs, the article will move to the latest issue of the ERJOR online.

Copyright ©The authors 2022. This version is distributed under the terms of the Creative Commons Attribution Non-Commercial Licence 4.0. For commercial reproduction rights and permissions contact permissions@ersnet.org

Letter to the editors

I read with interest the editorial by Crooks and Faruqi.[1] I agree with almost all of the concepts, however, given my experience, I must question why the scientific community does not take a drastic decision regarding SABA use in asthma. In 2019, Martin and Harrison wrote a similar editorial.[2] SABA overreliance was identified many times as the key issue [3-5]. But nothing happens. SABA's status quo has not been overcome for more than 30 years.

Since 2014 we eradicated SABA of asthma management in our asthma centre in Argentina. We achieved a zero-asthma hospitalisation goal. [6]

Education and treatment adherence are necessary but not enough to overcome the burden of asthma. Regardless of the adherence to maintenance therapy in the real world, it is safe to assume that patients will use SABA if they have SABA canisters readily available, either as a reliever or as maintenance treatment when they run out of ICS inhalers instead of refilling prescriptions. Therefore, eliminating SABA monotherapy use in alignment with the latest GINA recommendations [7] is important. First, do no harm.

Considering the increasing burden of asthma, we established the Asthma Centre in June 1993. Despite continuous education, routine lung function tests and follow-up by specialists, written asthma action plans and unrestricted access to ICS and as-needed SABA, we were unable to eliminate all asthma hospitalisations. Based on the study by O'Byrne and colleagues [8], in which budesonide/formoterol combination as both maintenance and reliever therapy (MART) reduced exacerbation rates, we adopted this approach for the entire spectrum of asthma severity in our Asthma Centre in 2014, eliminating SABA from asthma management. Whilst free access to ICS and LABA contributed to the success of the programme, it is unlikely to be the most influential factor. Although educational initiatives and free access to medications were a long part of the programme, it was successful only after SABA was eliminated from asthma management.

Finally, is it time to end our love affair with short-acting β 2-agonists in asthma?[1] Definitively YES.

Luis J Nannini MD. First Saba-free Asthma Department. Hospital de G Baigorria. Universidad Nacional de Rosario. Argentina.

References

- 1.-Crooks MG, Faruqi S. It is time to end our love affair with short-acting β2-agonists in asthma. ERJ Open Res 2022; 8: 00353-2022 DOI: 10.1183/23120541.00353-2022
- 2.-Martin, M. J., & Harrison, T. W. (2019). Is it time to move away from shortacting beta-agonists in asthma management? Eur Respir J, 53(4).
- 3.-Suissa S, Ernst P, Boivin JF, Horwitz RI, Habbick B, Cockroft D, Blais L, McNutt M, Buist AS, Spitzer WO. A cohort analysis of excess mortality in asthma and the use of inhaled beta-agonists. Am. J. Respir. Crit. Care Med. 1994; 149: 604–610.
- 4.-Noorduyn SG, Qian C, Johnston KM, et al. SABA use as an indicator for asthma exacerbation risk: an observational cohort study (SABINA Canada). ERJ Open Res 2022; 8: 00140-2022.
- 5.-Nwaru BI, Ekstrom M, Hasvold P, et al. Overuse of short-acting β2-agonists in asthma is associated with increased risk of exacerbation and mortality: a nationwide cohort study of the global SABINA programme. Eur Respir J 2020; 55: 190187.
- 6.- Nannini LJ, Neumayer NS, Brandan N, Fernandez OM, Flores DM. Asthmarelated hospitalizations after implementing SABA-free asthma management with a maintenance and anti-inflammatory reliever regimen. Eur Clin Respir J 2022. Vol 9 DOI: 10.1080/20018525.2022.2110706.
- 7.-Global Initiative for Asthma. Global Strategy for Asthma Management and Prevention 2022. Available from: https://ginasthma.org/.
- 8.- O'Byrne PM, Bisgaard H, Godard PP, et al. Budesonide/formoterol combination therapy as both maintenance and reliever medication in asthma. Am J Respir Crit Care Med 2005; 171: 129-136.