

## Obsolete Anti-pneumococcal Vaccination Recommendations in the Spanish Guidelines for the Management of Asthma (GEMA 4.0)<sup>☆</sup>



### *La guía española del manejo del asma (GEMA 4.0) está obsoleta en lo que a vacunación antineumocócica se refiere*

To the Editor:

The most recent version of the Spanish Guidelines for the Management of Asthma (GEMA 4.0) states in the section on recommendations for vaccination that: "Influenza and pneumococcal vaccination have shown no efficacy in preventing asthma exacerbations. However, since it is a cost-effective strategy, and the risk of complications in chronic patients in high, annual influenza vaccination should be considered in pediatric and adult patients with moderate-to-severe asthma."<sup>1</sup> This statement (supported by a reference from the year 2002) omits the recommendation of pneumococcal vaccination, making it obsolete in the light of current knowledge.

Numerous papers, some of which were published by the Spanish Society of Pulmonology and Thoracic Surgery (SEPAR) itself, recommend pneumococcal vaccination in asthma patients.<sup>2–4</sup> Specifically, the consensus document on anti-pneumococcal vaccination in adults with underlying disease, signed by 16 scientific societies, states that "In addition to COPD, asthma is another chronic respiratory disease which appears to act as a risk factor". Several specific recommendations and recent systematic reviews on pneumococcal vaccination in subjects with respiratory diseases refer to the need to prevent pneumococcal disease in these patients due to their increased risk.<sup>4–6</sup>

Asthma patients have been reported in various studies to have a higher incidence of invasive pneumococcal disease (IPD), correlating with the degree of asthma severity. A greater risk of developing IPD is seen in the high risk group, defined as asthmatics with 1 or more hospitalizations or visits to the emergency room, long-term use of rescue treatment or oral corticosteroids, or use of beta-agonists  $\geq 3$  times during the previous year. A systematic review of IPD in asthma patients concluded that in view of the high risk of these patients, pneumococcal vaccination should be recommended in this population.<sup>7</sup>

Similarly, available data on pneumococcal pneumonia, the most common form of pneumococcal disease in adults, show a significant increase in the incidence and risk of this entity in asthmatics compared to the healthy population.<sup>5</sup> Okapuu et al.<sup>6</sup> calculated the number of asthma patients who needed to be vaccinated (NNV) to prevent 1 case of IPD, using both the 13-valent pneumococcal conjugated vaccine (PVC13) and the 23-valent pneumococcal polysaccharide vaccine (PPV23). Assuming a vaccine efficacy of 65%, the NNV ranged between 135 and 839 adults, a number comparable to that found for other diseases considered high-risk for which pneumococcal vaccination with both vaccines

is recommended. Moreover, the CAPiTA study (clinical efficacy of PCV13 pneumococcal vaccination against pneumococcal pneumonia), with more than 84,000 subjects  $\geq 65$  years of age, including patients with asthma and other respiratory diseases, demonstrated that PVC13 is effective for preventing both IPD and pneumococcal pneumonia caused by the vaccine serotypes.<sup>7</sup>

In the light of this evidence, pneumococcal vaccination is currently recommended in asthma patients, preferably with a single dose of PCV13, subsequently followed by PPV23 vaccination. In view of the importance, prestige and clinical utility of the GEMA guidelines, we request a rectification and update of the vaccination section which takes into account the current recommendations summarized in the indication for pneumococcal vaccination in asthma patients, particularly those with severe forms of the disease.

## References

1. GEMA 4.0. Asma y enfermedad pulmonar obstructiva crónica. Guía española para el manejo del asma. Available from: <http://www.gemasma.com> [accessed 01.06.15].
2. Picazo JJ, Alonso LM, Arístegui J, Bayas JM, Sanz J, del Amo P, et al. Consenso sobre la vacunación anti-neumocócica en el adulto con patología de base. *Rev Esp Quimioter.* 2013;26:232–52.
3. Casas Maldonado F, Alfageme Michavila I, Barchilón Cohen VS, Peis Redondo JI, Vargas Ortega DA. Recomendación de la vacuna antineumocócica en las enfermedades respiratorias crónicas. *Semergen.* 2014;40:313–25.
4. Alfageme Michavila I, Hilaes Vera J, Alfageme I. La vacuna antineumocócica conjugada en la patología respiratoria. *Monogr Arch Bronconeumol.* 2014;1:109–17.
5. Shea KM, Edelsberg J, Weycker D, Farkouh RA, Strutton DR, Pelton SI. Rates of pneumococcal disease in adults with chronic medical conditions. *Open Forum Infect Dis.* 2014;27: ofu024.
6. Okapuu JM, Chétrit E, Lefebvre B, Quach C. How many individuals with asthma need to be vaccinated to prevent one case of invasive pneumococcal disease? *Can J Infect Dis Med Microbiol.* 2014;25:147–50.
7. Bonten MJ, Huijts SM, Bolkenbaas M, Webber C, Patterson S, Gault S, et al. Polysaccharide conjugate vaccine against pneumococcal pneumonia in adults. *N Engl J Med.* 2015;372:1114–25.

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