EDITORIAL

ASTHMA TREATMENT: IMPROVING EFFICACY. REDUCING COSTS

The physician's only professional competence and responsibility is to take the steps necessary to improve the health care of the patient and, above all, to improve the evolution of the disease and effect a cure. When dealing with chronic, sometimes incurable, diseases, improving the patient's quality of life is a priority. If these aims are compatible with reducing health care costs, a good cost-effectiveness ratio will have been obtained. For physicians, economic considerations should never prevail over the provision of the best health care possible. Physicians will only choose cheaper therapeutic options when they are sure that these will not jeopardize treatment efficacy.

Health authorities and insurance companies are naturally concerned about the increase in costs produced by the rise in the number of allergic patients, especially asthmatics, due to the greater incidence of this disease in the last few years as well as the higher price of currently used medication.

Numerous recent studies report the figures for this expenditure, which vary from country to country. There are several reasons for this but the main one is the difficulty of quantifying real expenditure on this disease. To do this, direct costs arising from study methods, medication, administration and control systems (cameras, PEFM), hospital and emergency department care, health care personnel (physicians and auxiliary staff) and health education should be included. In addition, indirect costs, such as lost days at work, absenteeism from school, child carers' days off work, early retirements, social costs (home-help services), etc. should also be calculated. Difficult to quantify are intangible costs, social problems arising from children's educational shortcomings, home care of patients, and other psychological and affective problems (dissatisfaction, fears, sadness, etc.) (1, 2).

In general, these publications report the overall figures for these factors, at most separating direct from indirect costs. As far as the physician is concerned, that is, medication costs, these are usually taken overall, sometimes without specification, but above all, without making any reference to cost-effectiveness, which is what interests us (3-5), although other studies place greater emphasis on the medication used (6, 7).

Cost reduction is related to better health care and to the use of the most effective therapeutic measures that diminish the frequency and intensity of symptoms with the least medication possible.

One of the reasons for the increase in costs is the practice of transferring asthmatic

patients to primary health care centers. Several studies have shown that specialist care of asthmatics lowers costs by reducing on 50 % the attendance at emergency departments, decreasing admission to hospital (67 %) where recovery time is shorter (38 %), as well as by decreasing the need for unforeseen consultations (8-11). As shown by Nieto in a study carried out in different regions of Spain, lower consumption of antiasthmatic medication is directly related to a greater number of specialists, which entails increased specialist care (12). According to this author, the main reasons are the better training of specialists in the detection of the causes of the disease and its prevention, their reduced susceptibility to biased marketing campaigns, reduced costs in unjustified diagnostic tests and, lastly, specialists' ability not to identify the chronic nature of asthma with its incurability.

To this latter factor must be added a greater willingness to apply treatment combining etiologic and pathogenic elements. Since asthma is an inflammatory disease that in many cases tends to be chronic, a three-pronged approach is required for its prevention: early diagnosis and immediate treatment (during infancy in most cases), etiologic treatment resulting from appropriate allergological study, and pathogenic treatment to prevent or reduce inflammation.

Undoubtedly, antiinflammatory medication (corticosteroids and anti-leukotrienes) is essential in asthma treatment while bronchodilators help to maintain the permeability of the bronchial tree. However, because they do no affect the etiology of the disease, these agents do not prevent sensitization to allergens in the case of atopic asthma and consequently their use cannot easily be discontinued (or that of new medication that might appear with the same aim). Allergists are well aware of this and know how to use the only currently available therapy able to modify the course of the disease, immunotherapy, in agreement with the well-known posture of the World Health Organization. The efficacy of immunotherapy has been sufficiently well demonstrated; it not only reduces specific sensitization to the allergens employed in each case but also prevents the development of new sensitizations in a great many patients (13, 14), as long as it is based on appropriate investigations and observance of the indications and contraindications. Experience with this therapeutic modality reveals that in most patients, antiinflammatory medication can be reduced or even discontinued. As demonstrated by various studies (12, 13, 15, 16), this obviously reduces the cost of treating the disease.

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REFERENCES

- 1. Krahn MD, Berka C, Langlois P, Detsky AS. Direct and indirect costs of asthma in Canada, 1990. Can Med Ass J 1996; 154: 821-31.
- 2. European Allergy White Paper. Update. Chapter 2. Socio-economic and public health aspects of allergic diseases. The UCB Institute of Allergy. Brussels, 1999.
- 3. Rico-Méndez FG, Barquera S, Cabrera DA, Escobedo S, Ochoa LG. Bronchial asthma healthcare cost in México: analysis of trends from 1991-1996 with information from the Mexican Institute o Social Security. Invest Allergol Clin Immunol 2000; 10: 334-41.
- 4. Lozano P, Sullivan SD, Smith D, Weiss KB. The economic burden of asthma in US children: estimates from National Medical Expenditure Survey. J Allergy Clin Immunol 1999; 104: 957.
- 5. Weiss KB, Sullivan SD, Lyttle CS. Trends in the cost of illness for asthma in the United States, 1985-1994. J Allergy Clin Immunol 2000; 106: 493-9.
- 6. Paltiel AD, Fuhlbrigge AL, Kitch BT, Liljas B, Weiss ST, Neuman PJ. Cost-effectiveness of inhaled corticosteroids in adults with mild-to-moderate asthma: results from the Asthma Policy Model. J Allergy Clin Immunol 2001; 108: 39-46.
- 7. National Asthma Education and Prevention Program Task Force on the Cost, Quality of care and Financing of Asthma care. NIH Publication, n.º 55-807. September 1996.
- 8. Wstley CR, Spiecher B, Starr L, Simons O, Sanders B Marsh W et al. Cost effectiveness of an allergy consultation in the management of asthma. Allergy Asthma Proc 1997; 18: 15-8.
- 9. Zeiger RS, Seller S, Mellon MH, Wald J, Falkoff R, Schatz M. Facilitated referral to asthma specialist reduces relapses in asthma emergency room visits. J Allergy Clin Immunol 1991; 87: 1160-8.
- 10. Mahr TA, Evans R. Allergist influence on asthma care. Ann Allergy 1993; 71: 115-20.
- 11. Miralles JC, Negro JM, Sánchez-Gascón F. Atención especializada en el asma. Alergol Inmunol Clin 2000; 15: 375-84.
- 12. Nieto A. El coste del tratamiento del enfermo alérgico. Allergol Inmunol Clin 1999; 14 (Supl 2): 161-9.
- 13. Abramson M, Puy R, Weiner J. Immunotherapy in asthma: an updated systematic review. Allergy 1999; 54: 1022-41.
- 14. Purello-D'Ambrosio F, Gangemi S, Merendino RA, Isola S, Puccinelli P, Parmiani S, Ricciardi L. Prevention of new sensitization in monosensitized subjects submitted to specific immunotherapy or not. A retrospective study. CI Exp Allergy 2001; 31: 1295-1302.
- 15. Hernández Peña J, Nieto A. Rentabilidad coste-beneficios de la inmunoterapia en el asma bronquial. VII Curso Postgrado. Tratamiento del asma. Hospital Insular Universitario de Gran Canaria. Febrero 2000.
- 16. Sullivan TJ. Cost effectiveness analysis of antigen immunotherapy. Annual Meeting of the American College of Allergy, Asthma and Immunology. Chicago, November 1999.