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EDITORIAL

Gastroesophageal reflux disease: Dichotomy of the clinical trial and clinical practice ☆,☆☆



La enfermedad por reflujo gastroesofágico: la dicotomía del ensayo clínico y la práctica clínica

Introduction

Gastroesophageal reflux disease (GERD) is a chronic illness that is estimated to affect around 20% of the population of the western countries,¹ and in turn, represents approximately 5% of the workload of primary care physicians. It is a condition that alters numerous physical and psychosocial aspects of its sufferers.² Even though the appearance of proton-pump inhibitors (PPIs) transformed the paradigm employed in GERD, many unanswered questions still abound in daily practice.³

In the current issue of the *Revista Mexicana de Gastroenterología*, López-Colombo et al.⁴ reported the results of their study on patients under 50 years of age that were seen at a primary care unit for presenting with symptoms suggestive of GERD (defined by symptoms consistent with the condition and a Carlsson-Dent questionnaire score ≥ 4), in the absence of clinical alarm symptoms or previous PPI, prokinetic, or antacid use. The patients that met the inclusion criteria and agreed to participate in the study were then intentionally interviewed through a questionnaire that examined their lifestyle (created by the authors based on

factors described in the literature). The patients were prescribed a dose of 20 mg of oral omeprazole to be taken 30 min before breakfast for a period of 4 weeks. The ReQuest questionnaire was applied to define successful response to that 4-week dose of PPI. The baseline score was compared with the score at the end of the treatment period and a final score $\geq 50\%$ of that of the baseline was considered a positive response. The patients that responded according to that clinical outcome were then followed for 12 weeks, with evaluations at 8 and 16 weeks from the study onset (post-treatment weeks 4 and 12). During that phase of the study, symptom recurrence was defined as an increase $\geq 20\%$ in relation to the ReQuest score. Once the study was completed, the authors reported that out of 90 study subjects, 83 finished the first phase (treatment stage). In that group, in accordance with the predefined criteria, the authors found a success rate of 89% ($n=74$). At follow-up, the patients with successful response showed an accumulated symptom recurrence rate of 66% ($n=49/74$). With respect to the lifestyle questionnaire, the authors identified a greater consumption of citrus fruits and NSAIDs in the patients that did not have a predefined symptom response. In short, of the initial study cohort, only 33% ($n=25$) had a 50% reduction of heartburn at 16 weeks of follow-up, under a standard PPI regimen.

The present study is noteworthy, because it broaches a complex subject in primary care practice that also represents one of the main reasons for medical consultation in different studies.^{5–10} Focusing on a “therapeutic test” in patients with typical GERD symptoms is appealing in such a clinical setting and has been extensively analyzed using different PPI doses and salts. However, this approach has limitations, given the 78% sensitivity and 54% specificity described in a meta-analysis.¹¹ Thus, a negative test does

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☆☆ See related content at DOI: 10.1016/j.rgmxen.2017.03.002, Lopez-Colombo A, Pacio-Quiterio MS, Jesus-Mejenes LY, Rodriguez-Aguilar JEG, Lopez-Guevara M, Montiel-Jarquín AJ, et al. Risk factors associated with gastroesophageal reflux disease relapse in primary care patients successfully treated with a proton pump inhibitor. *Revista de Gastroenterología de México*. 2017;82:106–114.

not rule out the presence of GERD, nor is a positive test necessarily diagnostic.¹² In addition, despite its extensive use and practicality (and being better understood by patients),¹³ the Carlsson-Dent questionnaire has limitations in relation to diagnostic performance and has been compared to the clinical judgement of the physician.¹⁴ Another limitation is the fact that the questionnaire itself does not distinguish GERD from other conditions in which heartburn is a cardinal symptom, such as functional heartburn and hypersensitivity to reflux.¹⁵ These factors can partially explain why the authors found a response rate of 89% at 4 weeks, which then fell to one third after 16 weeks of follow-up, given that the entry criterion had its own limitations. Furthermore, studies that evaluate the sustained effect of this test show mixed results, with recurrence rates reaching almost 50%.¹⁶⁻¹⁹

In regard to the conclusions about lifestyle, the present study results show us how complex and subjective the assessment of those factors is. The authors have concisely and thoroughly evaluated the aspects that have shown greater consistency in different analyses and clinical guidelines reported in the literature.¹² Nevertheless, the current studies have failed to demonstrate high-quality evidence with respect to the systematic elimination of foods from the diet, and at present there is only evidence for the recommendations that include stopping smoking, losing weight, adjusting meal schedules, and in patients with nocturnal reflux, sleeping with a raised head.²⁰⁻²³ We could thus conclude that it is vitally important to offer evidence-based advice to our patients with GERD symptoms, even though it may not be the cornerstone of management.

In conclusion, the present study shows a very frequent setting in medical practice at all levels of care. Despite its limitations, the study demonstrated that a standard dose (20 mg/day 30 min before breakfast) was useful for symptom control in at least one third of the study subjects. This response rate (with all the limitations of the available instruments) reflects the real-life scenario of treating patients with GERD. Moreover, this study shows that a structured approach (with defined clinical outcomes and periods) can contribute to the efficient management of this condition, implying that a subgroup of patients could benefit from treatment without the need for complementary diagnostic studies. GERD will continue to be a frequent entity in our environment, making the examination and evaluation of the efficacy of structured interventions a valid endeavor that has great importance for clinical practice.

Conflict of interest

The authors declare that there is no conflict of interest.

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