

## Multivariate Analysis of Factors Predicting Outcome After Laparoscopic Nissen Fundoplication

To the Editors:

I read with great interest the article by Campos et al. (*J GASTROINTEST SURG* 1999;3:292-300) and found it to be an excellent article evaluating objective parameters. There is one point, however, that should be approached with caution before definite conclusions are drawn—that is, the short follow-up of a mean of 15 months. At this time patients with Barrett's esophagus who undergo classic open surgery show a 90% rate of good or excellent responses. However, at 8 or 10 years we have noted a recurrence rate of 60%.<sup>1</sup> It is very important to have a longer follow-up of these patients to determine their late response. Therefore, the results of the present paper should be as follows: 173 patients had an excellent or good outcome (87%) and 26 (13%) showed a fair or poor outcome at a mean of 15 months' follow-up. It is not known what will happen 5 years later, but it is possible that the percentage of patients with a fair or poor outcome will rise.

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### REFERENCE

1. Csendes A, Braghetto I, Burdiles P, Puente G, Korn O, Díaz JC, Maluenda F. Long-term results of classic antireflux surgery in 152 patients with Barrett's esophagus: Clinical, radiologic, endoscopic, manometric, and acid reflux test analysis before and late after operation. *Surgery* 1998;123:645-657.

## Reply

We thank Dr. Csendes for his interest in our report. He points out that the follow-up was relatively short, which is true. Longer term analyses including 5-year studies are presently emerging.

Dr. Csendes recently reported symptomatic success in 50% to 60% of patients with Barrett's esophagus at 10 to 11 years. This brings up the question of why Barrett's esophagus was not identified as a predictor of outcome in our multivariate analysis. There are two likely reasons for this. The first, as he pointed out, may be the relatively short follow-up. We believe, however, that more important is the fact that our center advocates the liberal use of transthoracic antireflux procedures, particularly in patients with Barrett's esophagus. Thus the type of procedure selected may play a significant role. The discussion of our report points out that this multivariate analysis was carried out only in patients selected for laparoscopic fundoplication. This encompasses approximately 80% of those who undergo primary antireflux surgery at the University of Southern California. A disproportionate number of patients with Barrett's esophagus are approached via thoracotomy, which allows more complete esophageal mobilization, and we believe a better long-term symptomatic outcome.

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