Nature Reviews Gastroenterology & Hepatology **8**, 417 (2011); doi:10.1038/nrgastro.2011.106

GERD

Modern antireflux therapy for chronic GERD achieves and maintains remission at 5 years

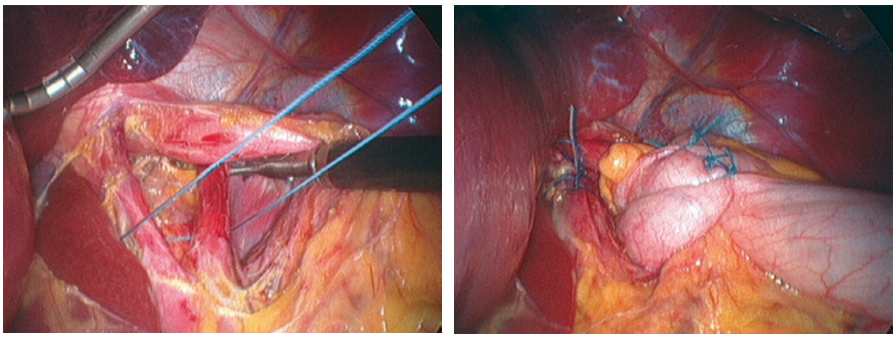
The 5-year results from the LOTUS trial show that modern treatment of chronic GERD—with optimized esomeprazole therapy or laparoscopic antireflux surgery (LARS)—has improved long-term patient outcomes.

Jean-Paul Galmiche and colleagues decided to compare optimized esomeprazole therapy with LARS after identifying a gap in the literature concerning the use of modern medical versus surgical treatment for chronic GERD. "Previous papers reported the comparison of first-generation PPIs and open surgery," explains Galmiche.

In this exploratory, open, parallel group, multicenter European study, 554 patients with chronic symptomatic GERD were randomly allocated to undergo LARS ($n = 288$) or receive esomeprazole ($n = 266$). All patients had symptoms that were responsive to treatment with esomeprazole, as determined during a 3-month run-in period (esomeprazole 40 mg per day). Only patients with no more than Los Angeles grade B esophagitis at baseline and mild (that is, present, but easily tolerated) heartburn or regurgitation at the end of the run-in period were eligible for randomization.

The study's primary end point was the time to treatment failure. Patients in the esomeprazole group initially received a dose of 20 mg per day, but those with incomplete control of heartburn and regurgitation were allowed to escalate the dose to 40 mg per day and then, if necessary, to split the dose to 20 mg twice per day. If dose escalation or splitting was not sufficient to control symptoms then the patient was deemed to have experienced treatment failure. Treatment failure in the LARS group was defined as inadequate symptom control with the need for acid-suppressive therapy.

248 patients underwent LARS of whom 180 completed 5 years of follow-up, whereas 266 patients received esomeprazole of whom 192 completed 5 years of follow-up. At the 5-year follow-up, the estimated remission rates were 92% (95% CI, 89–96%) in the esomeprazole group and 85% (95% CI, 81–90%) in the LARS group (log-rank $P = 0.048$). However, this statistically significant difference disappeared when patients randomly allocated to treatment but who did not complete the study were accounted for in a best-case scenario sensitivity analysis (that is, it was assumed that they would have experienced treatment success).



Laparoscopic Nissen fundoplication. Courtesy of J.-P. Galmiche.

"With respect to secondary outcomes," clarifies Galmiche "LARS better controlled regurgitation, but at the cost of significantly more frequent dysphagia, bloating and flatulence." Both treatments were well tolerated and had similar safety profiles. The percentage of serious adverse events reported was similar for both groups (24.1% for esomeprazole and 28.6% for LARS). In addition, although 5 deaths occurred during the study (4 in the esomeprazole group and 1 in the LARS group), they were not attributed to treatment.

Regardless of the type of treatment, "the 5-year results are much better than those of previous studies, so we have made significant progress in the treatment of chronic GERD," says Galmiche. The authors suggest that the remission rates achieved and maintained in the LOTUS trial are favorable in comparison with previous studies because they used modern treatments and allowed dose escalation and dose splitting in the esomeprazole group. They acknowledge several study limitations: the enrollment of PPI responders only; the percentage of patients allocated to the LARS group but who did not undergo surgery; and the exploratory study design (versus a superiority or equivalence study).

As GERD is a chronic condition, patient preference is important when it comes making a choice between medical and surgical treatment. Some patients will be reluctant to take medication in the long term and may, therefore, prefer the surgical option, whereas others may favor medical treatment over surgery. "These results provide very useful information for the individual patient and the clinician," says Galmiche. "It is now easier to inform the patient about the advantages and disadvantages of each treatment."

Cost effectiveness could not be evaluated in this study (owing to the different health-care systems in the European countries of the participating groups), and Galmiche suggests that future research efforts should address this issue.

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Original article Galmiche, J.-P. *et al.* Laparoscopic antireflux surgery vs esomeprazole treatment for chronic GERD. *JAMA* **305**, 1969–1977 (2011)