# Long-Term Results of a Randomized Prospective Study Comparing Medical and Surgical Treatment of Barrett's Esophagus

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## **Objective**

To compare the results of medical treatment and antireflux surgery in patients with Barrett's esophagus (BE).

# **Summary Background Data**

The treatment of choice in BE is still controversial. Some clinical studies suggest that surgery could be more effective than medical treatment in preventing BE from progressing to dysplasia and adenocarcinoma. However, data from prospective comparative studies are necessary to answer this question.

#### **Methods**

One hundred one patients were included in a randomized prospective study, 43 with medical treatment and 58 with antireflux surgery. All patients underwent clinical, endoscopic, and histologic assessment. Functional studies were performed in all the operated patients and in a subgroup of patients receiving medical treatment. The median follow-up was 5 years (range 1–18) in the medical treatment group and 6 years (range 1–18) in the surgical treatment group.

## Results

Satisfactory clinical results (excellent to good) were achieved in 39 of the 43 patients (91%) undergoing medical treatment

and in 53 of the 58 patients (91%) following antireflux surgery. The persistence of added inflammatory lesions was significantly higher in the medical treatment group. The metaplastic segment did not disappear in any case. Postoperative functional studies showed a significant decrease in the median percentage of total time with pH below 4, although 9 of the 58 patients (15%) showed pathologic rates of acid reflux. High-grade dysplasia appeared in 2 of the 43 patients (5%) in the medical treatment group and in 2 of the 58 patients (3%) in the surgical treatment group. In the latter, both patients presented with clinical and pH-metric recurrence. There was no case of malignancy after successful antireflux surgery.

## **Conclusions**

These results show that there are no differences between the two types of treatment with respect to preventing BE from progressing to dysplasia and adenocarcinoma. However, successful antireflux surgery proved to be more efficient than medical treatment in this sense, perhaps because it completely controls acid and biliopancreatic reflux to the esophagus.

The aim of treatment for Barrett's esophagus (BE) is to bring symptoms under control, cure associated inflammatory lesions, and prevent the appearance of dysplasia and adenocarcinoma. The therapeutic options are medical treatment for life and antireflux surgery. As both are equally efficient in controlling symptoms and neither can cause the

metaplastic segment to disappear, <sup>1-4</sup> some authors recommend medical treatment because it is less aggressive. <sup>5-8</sup> However, there are clinical studies that seem to indicate that efficient surgical treatment manages to cure a higher rate of associated inflammatory lesions<sup>2,4</sup> and is better than medical treatment in preventing BE from progressing to adenocarcinoma. <sup>2,9,10</sup> More recently, Spechler et al., <sup>11</sup> in a randomized controlled trial, have questioned the advantages of surgical treatment in preventing the development of adenocarcinoma. Due to the small number of long-term randomized prospective studies, the treatment of choice in BE is still controversial. The aim of this article is to present the results of a randomized prospective trial comparing medical and surgical treatment in patients with BE.

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