GERD Implant Technique Shown to Last 3 Years

BY TIMOTHY F. KIRN
Sacramento Bureau

CHICAGO — The polymer injection treatment for gastroesophageal reflux disease, known as Enteryx, outperformed sham surgery and lasted up to 3 years, investigators said in presenting two studies at the annual Digestive Disease Week.

Enteryx, a liquid that solidifies into a spongy implant, is injected into the deep muscle layer at or below the esophagogastric junction to increase the competence of the lower esophageal sphincter.

Indications for treatment are still not clear because the subjects so far have not been defined, except that they have been chronic, PPI-dependent patients.

In one of the two studies, investigators led by Jacques Deviere, M.D., compared Enteryx treatment with sham surgery; all patients were dependent on proton-pump inhibitor (PPI) therapy prior to the start of the study. At 3 months, 68% of 32 patients given the polymer injection treatment were completely off PPI drugs, and another 13% had reduced their use by at least 50%.

In contrast, in the sham surgery group of 32 patients, 41% discontinued PPI use and another 12% reduced PPI use by at least 50%, said Dr. Deviere, chief of the department of gastroenterology at Erasme Hospital of the Free University of Brussels.

In the second uncontrolled study, which involved a 3-year follow-up of 60 patients, the percentage of patients who benefited peaked at 1 year, when 71% were completely off PPI therapy, and another 13% had reduced their PPI use by 50%. At 3 years, 48% were off PPIs, and another 17% had reduced PPI use by 50%, said Glen A. Lehman, M.D., professor of medicine at Indiana University, Indianapolis.

These two studies are major steps forward toward the adoption of Enteryx treatment—approved by the Food and Drug Administration in 2003—into routine practice, commented Gary W. Falk, M.D., a professor of medicine at the Cleveland Clinic Foundation.

But the specific indications for this treatment are still not clear, because the subjects in the trials conducted to date have not been defined except that they have been chronic, PPI-dependent patients.

Moreover, caution needs to be exercised in evaluating the treatment because the material that is implanted appears to be permanent, and head-to-head trials with other therapies still need to be performed, Dr. Falk added.

At least 3,000 patients have received Enteryx treatment so far, according to available estimates.

But it is also not exactly clear how the treatment works, Dr. Falk noted. In all the trials reported so far, including the two new trials, the treatment has not appreciably changed the esophageal pH of most patients it has helped.

It may be that the pH is not changed, but the treatment is reducing the amount of acid escaping from the stomach into the esophagus, he suggested.

Regarding the fall-off in efficacy over time seen in the 3-year follow-up, Dr. Lehman said he could not predict whether that trend would continue. The study measured esophageal pH at 12 months, but there were no pH measurements after that. Moreover, none of the patients was examined endoscopically at 3 years to see if the implant was still present and how it was faring.

Dr. Lehman suggested that the fall-off could be due to patients' becoming unwilling to tolerate discomfort that they initially considered an improvement.

In his study, quality-of-life heartburn scores improved by a median of 76% relative to scores at baseline during a washout period when patients were withdrawn from PPI treatment. That percentage improvement continued throughout the 3 years, he noted.

The majority of patients treated with Enteryx experience a transient retrosternal, burning chest pain and/or dysphagia at first, the investigators noted. However, there were no serious, device-related adverse events in Dr. Lehman's follow-up trial. In the controlled trial, one patient treated with Enteryx needed an esophageal dilatation procedure because of continuing dysphagia.

The two trials were sponsored by Boston Scientific Corp., Natick, Mass., the manufacturer of the Enteryx procedure kit. ■

Drugs That Suppress Acid Raise Risk of Hip Fracture

BY ANN C. LOGUE
Contributing Writer

CHICAGO — Long-term use of proton-pump inhibitors, histamine$_2$-receptor antagonists, and other acid suppressors increases the risk of hip fracture, Yu-Xiao Yang, M.D., reported at the annual Digestive Disease Week.

Physicians turning to a combination of NSAIDs and proton-pump inhibitors (PPIs) in place of cyclooxygenase-2 (COX-2) inhibitors should be aware of this effect in patients who are at increased risk of osteoporosis, but they should not deny this therapy to patients with appropriate indications, said Dr. Yang of the division of gastroenterology at the University of Pennsylvania, Philadelphia.

PPIs interfere with calcium absorption, leading to an increased risk of hip fracture.

"Do patients with more than 1 year of PPI therapy have more hip fractures? Up until now, there has been no epidemiological study to address this," Dr. Yang said.

His conclusions came from a retrospective cohort study of 518,096 patients older than 40 years who were included in the U.K. General Practice Research Database between May 1987 and April 2002. Of these, 47,631 had more than 1 year of exposure to a PPI; the remaining 470,465 patients had no exposure to either a PPI or histamine$_2$-receptor antagonist (H2RA).

By looking at complete prescription information and validated hip fracture reports, the researchers discovered that taking a PPI long term was associated with an increased risk of hip fracture, with a relative risk of 1.9 associated with at least 1 year of PPI use. The relationship had both a dose-response effect and a duration-response effect. H2RA use also increased the relative risk of hip fracture, but to a lesser extent.

In general, the PPI-exposed patients were sicker and took more medications, so potential confounders were considered and adjusted for if they represented markers of comorbidity status or if they had an effect on the central nervous system that would increase the risk of falling, Dr. Yang said. After adjustment for potential confounders, there was still a significantly increased risk of hip fracture among long-term PPI users. Significant confounders included antidepressant use and an increased number of office visits.

Another hypothesis of the study, Dr. Yang said, is that men would be at greater risk because they do not take calcium supplements and do not talk about osteoporosis with their doctors. And, in fact, the data show just that: The relative risk of hip fracture associated with PPI use was much higher among men than among women.

The study was limited by the assumption of 100% compliance with therapy and the lack of information on use of over-the-counter drugs, Dr. Yang said. ■

Barrett's Esophagus Research Slow to Filter Into Practice

BY ANN C. LOGUE
Contributing Writer

CHICAGO — There is a significant gap between expert opinion regarding Barrett's esophagus treatment and the opinions of gastroenterologists in general practice, indicating a need for ongoing physician education, Colin Howden, M.D., said at the annual Digestive Disease Week.

'There is not complete agreement about managing Barrett's esophagus, even among the experts.'

DR. HOWDEN

To test how much recent research has filtered into the general practice community, Dr. Howden and his team queried 275 gastroenterologists attending three regional conferences in 2004. The surveyed physicians were attending conferences sponsored by TAP Pharmaceutical Products Inc., but the company provided no financial support for the study and had no role in the analysis or reporting of results.

The gastroenterologists used hand-held response devices to indicate how much they agreed or disagreed with statements about the treatment of Barrett's esophagus. Their answers were compared with opinions gleaned by the American Gastroenterological Association from a panel of 18 experts in the field.

There was a high level of agreement about the definition of Barrett's esophagus and the need for multiple systematic biopsies. However, the two groups differed in their approaches to surveillance and treatment.

None of the expert panel members accepted short-segment and long-segment Barrett's esophagus as distinct clinical entities, but 41% of the gastroenterologists surveyed did. None of the expert panel members accepted that screening reduced mortality or was cost effective, but 25% of the gastroenterologists though it reduced mortality, and 13% thought it was cost effective. Also, none of the expert panel members accepted that surveillance was cost effective, but 69% of the gastroenterologists believed that it was.

"There is not complete agreement about managing Barrett's esophagus, even among the experts," said Dr. Howden of Northwestern University, Chicago. "General gastroenterologists do a pretty good job at managing the condition, but their knowledge and understanding is a few years behind those of the experts."

In a related presentation, Hashem El-Serag, M.D., of Baylor College of Medicine, Houston, reported on research about the incidence of Barrett's esophagus in children and adolescents.

In a group of 8,038 patients under age 18 years who had an upper endoscopy between 1999 and 2002 in the United States, only 37 had suspected Barrett's, indicating that the incidence in children is extremely low.

Community hospitals were more likely to report suspected Barrett's in children and adolescents than were pediatric hospitals. The difference was not statistically significant, but the data may indicate that the condition is so rare in children that pediatric gastroenterologists don't see it enough to recognize it, Dr. El-Serag said. ■