

## Laparoscopic Nissen Fundoplication Beats Rx

LOS ANGELES — Laparoscopic Nissen fundoplication is superior to medication for overall symptom control in patients with gastroesophageal reflux disease, according to preliminary research results presented at the annual Digestive Disease Week.

Even patients who do well on medication may be candidates for surgery, said Dr. Mehran Anvari, director of the center for minimal access surgery at McMaster University in Hamilton, Ontario, the study's lead author. He presented the 1-year results of the study, in which patients whose symptoms were controlled by long-term use of proton pump inhibitors (PPIs) were randomized to either continued PPI therapy or laparoscopic Nissen fundoplication.

Of more than 200 patients with GERD who were eligible for the study, 104 gave informed consent. Four surgeons performed the surgery, using a previously published technique. In-

vestigators assessed symptoms every 3 months using a validated instrument and conducted 24-hour pH testing at 1 year.

Of the 104 randomized patients, 98 were available for follow-up after 1 year. Patients in both arms of the study showed improvement in 24-hour pH and in GERD symptoms. However, overall patient satisfaction with symptom control in the surgical group increased from 73.3 to 90.2 on a 100-point global rating scale, whereas results from the medication group stayed the same, compared with baseline.

Laparoscopic Nissen fundoplication may be an alternative for patients who don't want to be on long-term therapy with medication, Dr. Anvari said. While this trial showed surgery to be an effective option, particularly in terms of overall symptom control, surgery is operator dependent, he said.

—Mary Ellen Schneider

## GERD Surgery Is Still An Option For Select Patients, Expert Says

BY DIANA MAHONEY  
New England Bureau

DALLAS — The steep decline in antireflux surgery since the 1990s may be caused by skepticism following publication of a study suggesting that most patients who undergo surgery eventually resume taking antireflux medication, said Dr. Jonathan F. Finks at the annual meeting of the Society of American Gastrointestinal and Endoscopic Surgeons.

Based on data from the Nationwide Inpatient Sample, the number of patients older than age 18 who underwent antireflux surgery in the United States peaked at 32,907 in the year 2000. By 2003, that rate fell 27% to 23,998 patients.

"The rate of decline was approximately three times greater for patients in the 30- to 50-year-old age range than it was for patients older than 60," said Dr. Finks of the division of gastrointestinal surgery at the University of Michigan in Ann Arbor. The discrepancy may be explained by an increased likelihood on the part of gastroenterologists to recommend surgery for patients who have had problems for a longer time and who have not attained sufficient relief from medication.

On the heels of the antireflux surgery boom, results of a 2-year randomized controlled trial comparing surgical and medical management of gastroesophageal reflux disease (GERD) were published

(JAMA 2001;285:2331-8). The study showed that although patients in the surgical treatment group were less likely to regularly use antireflux medications than were patients in the medical antireflux therapy group, the use of antireflux medication in the surgical group was still substantial. In addition, there were no differences between the treatment groups in esophagitis grade, incidence of esophageal cancer, frequency of treatment of esophageal stricture, subsequent antireflux operations, or satisfaction with antireflux therapy.

The findings did not question the efficacy of antireflux surgery—which continues to be performed primarily via laparoscopic techniques, according to the data—but rather the supremacy of surgery over other management options, said Dr. Finks.

"Surgery is considered effective, with stable and low mortality and splenectomy rates, and it is associated with good patient satisfaction, but the study findings gave cause to gastroenterologists to reconsider the indications for surgery," Dr. Fink noted at the meeting.

The bottom line, he said, is that both surgical and medical management of GERD are reasonable options, but the decision on which approach to use should be based on assessment of the risks and benefits for individual patients.

Dr. Finks reported no conflicts of interest with respect to his presentation. ■

## Nonalcoholic Fatty Liver Emerging As Major Health Burden in the U.S.

BY MIRIAM E. TUCKER  
Senior Writer

PHILADELPHIA — Nonalcoholic fatty liver disease is emerging as a major health burden in the United States, Dr. K. Rajender Reddy said at the annual meeting of the American College of Physicians.

Often associated with obesity and underlying insulin resistance, nonalcoholic fatty liver disease (NAFLD) is believed to affect as much as 20%-30% of the U.S. population, said Dr. Reddy, professor of medicine and surgery and director of hepatology at the University of Pennsylvania, Philadelphia.

There is some debate about the amount of alcohol ingestion permitted to make the distinction between alcoholic steatosis and NAFLD, which is defined as increased liver weight by 5%-10% from fat accumulation (steatosis), in the absence of excessive alcohol consumption. Most experts agree, however, that overall alcohol consumption of less than 20 g per day is well below that which would be associated with significant alcoholic liver disease, noted Dr. Reddy, who is also medical director of liver transplantation at the university.

Classification of NAFLD falls into four types: Type 1 (fatty liver alone) and type 2 (fat accumula-

tion and lobular inflammation) are considered to be NAFLD alone. The more serious types 3 (fat accumulation and ballooning degeneration) and 4 (fat accumulation, ballooning degeneration, and either Mallory hyaline and/or fibrosis) are characterized as nonalcoholic steatohepatitis (NASH).

"There is a tendency to use the term NASH loosely in everyone who has nonalcoholic fatty liver disease. You should use the gen-



**'There is a tendency to use the term NASH loosely.'**

DR. REDDY

eral term NAFLD and reserve NASH only for those who have histologic evidence of steatohepatitis," Dr. Reddy advised.

Overall, about 10% of patients with NAFLD have NASH. Limited data on the natural history of these conditions suggest that about 15%-20% of patients with steatosis will progress to steatohepatitis at some point. Of those, smaller numbers will go on to develop fibrosis, cirrhosis, and he-

patocellular carcinoma.

Factors that predict progression from NAFLD to NASH include age greater than 45 years, type 2 diabetes, body mass index greater than 35 kg/m<sup>2</sup>, hypertension, and liver enzyme abnormalities. Overall, the 1- and 5-year survival rates for NASH have been reported to be 67% and 59%, respectively. But the mortality is not always liver-related and could be due to comorbid conditions such as hypertension, dyslipidemia, and diabetes. In one recent study of 420 NAFLD patients in Minnesota who were followed for a mean of 7.6 years, mortality was 34% greater than expected for the general Minnesota population (Gastroenterology 2005;129:113-21).

Data pertaining to treatment of NAFLD are also limited, but weight management is considered a major priority for all patients because of proven benefits in cardiovascular risk profile. Small anecdotal studies have indicated an improvement in biochemical parameters and liver histology with exercise and/or diet, while weight reduction of 10% or more has been shown to correct aminotransferase abnormalities and decrease hepatomegaly. ■

## Age Should Not Hinder Gastric Bypass Candidacy

BY MARY ELLEN SCHNEIDER  
Senior Writer

LOS ANGELES — Both seniors and adolescents can be good candidates for Roux-en-Y gastric bypass surgery, according to new research presented at the annual Digestive Disease Week.

In a review of 167 surgical cases at the Mayo Clinic in Rochester, Minn., involving patients aged 60 or older and adolescents aged 12-18 years, researchers found a significant decrease in obesity-related mortality after gastric bypass surgery, and limited morbidity and mortality overall.

The researchers reviewed the Mayo Clinic's 20-year bariatric surgery database and obtained morbidity and mortality rates from medical records. They also sent a questionnaire to surviving patients.

The older patients had higher rates of adverse events and saw less dramatic results both in decreases in body mass index (BMI) and self-reported health conditions. The 155 older patients—aged 60-76 years—had a 6% mortality after 5 years of follow-up, and

14% had had serious morbidities that delayed hospital discharge such as wound infections and bowel obstructions.

Patients reported about a 50% reversal in obesity-related comorbidities, and the mean BMI fell from 46 to 33 kg/m<sup>2</sup> at 1 year, according to senior study author Dr. Michael G. Sarr of the Mayo Clinic.

Mortality for older patients (0.7%) was significantly lower than that in a previous report about Medicare patients, Dr. Sarr said. That study reported a 30-day mortality of nearly 5% in patients aged 65 and older (JAMA 2005;294:1903-8). "That is not our experience at the Mayo Clinic," he said. But he added that mortality and morbidity post surgery can be high at centers that perform a low volume of these operations, while high-volume centers carry a much lower risk.

Among 12 adolescents aged 12-18 years, there were no serious adverse events and no deaths after 3 years of follow-up. The overall morbidity was about 10%, Dr. Sarr said. The adolescent patients had an average drop in BMI of 55 to 36, and patients reported experiencing an 82% reduction in obesity-related diseases. ■