

# Impact of Lactose Avoidance Is Uncertain

BY JEFF EVANS

BETHESDA, MD. — The health effects of lactose intolerance in people who forgo consuming dairy foods have not been adequately studied to determine if such individuals have any nutritional deficiencies or long-term clinical sequelae on bone and cardiovascular health, according to findings from a panel of experts assembled by the National Institutes of Health.

In a draft “state of the science” statement released, the 14-member panel was not able to estimate the prevalence of lactose intolerance from a systematic review of 54 studies but was

able to conclude that a substantial proportion of people who have little or no lactase activity do not have lactose intolerance and may be missing out on the health benefits provided by the nutrients in dairy foods, primarily calcium and vitamin D.

“Particularly in children and adolescents, it’s very dif-

ficult for them to receive the required amounts of calcium and vitamin D if they avoid dairy products completely,” panel chairperson Dr. Frederick J. Suchy said in a press briefing.

“One of the key problems that we recognize is that sometimes parents perceive themselves as being lactose intolerant when they’re not and then impose that condition on their child without any testing,” said Dr. Suchy, professor of pediatrics at Kravis Children’s Hospital at Mount Sinai Hospital, New York.

The panel defined lactose intolerance as the onset of gastrointestinal symptoms in an individual with lactose malabsorption that are ob-

served following a blinded, single-dose challenge of ingested lactose but not after ingestion of an indistinguishable placebo. None of the studies in the panel’s review used this definition or evaluated a representative sample of the U.S. population.

Many of the studies that the panel reviewed did not

verify if gastrointestinal symptoms resulted from lactose malabsorption (which may or may not be symptomatic) in people who have lost most or all lactase expression in their small intestine. These people, called lactase nonpersisters, form the majority of all people.

The panel also suggested that “determining the amounts of lactose that can be tolerated is an important step in developing evidence-based dietary recommendations that meet the needs of the individual.” Evidence suggests that adults and adolescents who have been diagnosed with lactose malabsorption could ingest at least 12 g of lactose (equivalent to the lactose content of 1 cup of milk) with no or minor symptoms.

In order that people with real or perceived lactose intolerance who do not eat dairy foods can obtain their nutritional benefits, the panel advised creating individualized strategies for patients, such as consuming small amounts of dairy foods with other meals and spreading their dairy intake throughout the day.

The panel noted that calcium-fortified soy or rice drinks, fruit juices, soy products, dried beans, and leafy greens are good nondairy dietary sources of calcium. None of the panelists had conflicts of interest. ■

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## Delaying Cholecystectomy In the Elderly Costs More

BY MICHELE G. SULLIVAN

HOT SPRINGS, VA. — Delaying gallbladder surgery in elderly patients with acute cholecystitis might save money in the short run, but it racks up a bigger bill later in health outcomes and cash outlay, judging by a Medicare claims database study.

Early surgery significantly reduced cholecystitis recurrence and emergency gallstone-related readmissions, saving Medicare \$7,000 for each avoided readmission, Dr. Taylor S. Riall said at the annual meeting of the Southern Surgical Association.

Dr. Riall of the University of Texas Medical Branch at Galveston, and her colleagues tracked Medicare claims data for almost 30,000 elderly patients (mean age 78 years) who were admitted for acute cholecystitis from 1996 to 2005. They examined cost and health outcomes for 24 months after the admission.

Most patients (89%) were white. More than half of the admissions (64%) were emergent; 36% were urgent. About one-quarter were admitted by a surgeon.

The majority of the patients (75%) underwent cholecystectomy during their initial hospitalization, and 71% of the procedures were laparoscopic. The median length of stay was 5 days, and the median Medicare payment was \$7,362. There was a 2% in-hospital mortality rate.

For the 25% of patients who did not undergo surgery during their initial hospitalization, the median hospital length of stay was 4 days and the median Medicare payment was \$4,251. However, Dr. Riall said, surgical patients had significantly fewer rehospitalizations over the 24-month follow-up period than did nonsurgical patients.

Among the 21,907 who had the surgery and were discharged alive, 1.6% were rehospitalized for gallstone-related problems and 2.5% (556 patients) for surgical complications. The overall Kaplan-Meier readmission rate in this group was 4.4% with all readmissions occurring in the first 60 days postoperatively; the median Medicare payment for each readmission was \$5,000.

These measures were all significantly different among patients who initially did not undergo cholecystectomy. Among the 7,250 who were discharged alive, 1,980 were later rehospitalized for gallbladder problems and 1,604 died in the 2 years following initial hospitalization. The Kaplan-Meier 2-year readmission rate was 38%, after adjustment for patient deaths, as these patients were no longer at risk of readmission. Of the patients readmitted for gallstone-related problems, 1,372 (19% of the discharged group) underwent a cholecystectomy and 608 (8%) did not. The overall median Medicare payment for readmission was \$7,000. Another 694 of the discharged patients (9.6%) also had a later cholecystectomy on an outpatient basis and did not require emergency readmission.

Mortality rates over the next 24 months also were significantly different between the groups: 15% for those who had surgery during initial hospitalization, vs. 29% for those who did not.

Although the survival difference was significant, Dr. Riall warned against making too many assumptions about mortality. “It’s almost certain that most patients who did not undergo cholecystectomy were sicker and had a higher 2-year mortality without cholecystitis,” said Dr. Riall, who did not report having any conflicts of interest. ■

## Obesity, Alcohol Together Raise Risk of Developing Cirrhosis

BY JENNIE SMITH

Obese women who consume moderate amounts of alcohol have a risk of developing cirrhosis nearly twice that of normal-weight women who drink the same amount, and obesity and heavy alcohol consumption act in concert to increase deaths from liver disease in men, according to two studies.

“In combination with moderate alcohol consumption, obesity substantially increases the likelihood of liver cirrhosis,” Bette Liu, Ph.D., lead author of the first study, said in a prepared statement.

Dr. Liu and her colleagues at the University of Oxford’s Cancer Epidemiology Unit—with funding from Cancer Research UK, the National Health Service, and the Medical Research Council—analyzed data from a cohort of 1,230,662 U.K. women, recruited between 1996 and 2001, with a mean age of 56. All had been screened for prior liver disease or cancer, though a fifth were current smokers and 2.4% had been treated for diabetes. A total of 46% of women in the study were considered to be of healthy weight or underweight (with a body mass index of less than 25 kg/m<sup>2</sup>), 36% were overweight (BMI 25 to less than 30), and 18% were obese (BMI of at least 30). A total of 77% drank alcohol, though the vast majority were light or moderate drinkers (BMJ 2010;340:c912 doi:10.1136/bmj.c912).

Over a mean follow-up of 6.2 years, 1,811 women had a first cirrhosis-related hospital admission or death, and 421 of these women had cirrhosis recorded for the first time at death.

Of middle-aged women of normal weight (a BMI of between 22.5 and 25) who drank less than 70 g of alcohol per week (a mean of less than half a drink

per day), 0.8 in 1,000 risked being hospitalized with or dying from cirrhosis over 5 years, compared with 1 in 1,000 for obese women with light drinking habits. When the drinks increased, however, the risk profile was magnified across all weight categories, and the risk contrast between normal-weight and obese women became starker.

Normal-weight women who consumed at least 150 g of alcohol per week (a mean of about two and a half alcoholic drinks a day) carried a risk of 2.7 in 1,000 of being hospitalized for or dying from cirrhosis within 5 years, the researchers found, with a 28% increase for each 5-unit increase in BMI above 22.5. For obese women, the risk increased to 5 in 1,000.

In the second study, funded by the Scottish government, Carole L. Hart, Ph.D., of the University of Glasgow and colleagues analyzed links among obesity, liver disease, and alcohol in 9,559 Scottish men, many of whom did report heavy drinking and just under half of whom were overweight or obese (42% and 6%, respectively). The men in the analysis had been recruited at varying ages (mean 47 years) in the 1960s and 1970s for two long-term cohort studies, which tracked their health data for an average of 29 years (BMJ 2010;340:c1240 doi:10.1136/bmj.c1240).

Eighty men died with liver disease as the main cause of death, and 146 died with liver disease mentioned in any of the causes of death.

Obese men who reported drinking at least 15 units of alcohol per week had a relative rate of developing liver disease nearly double that of obese men who drank between 14 or fewer units per week (9.73 vs 4.50, after adjustment).

Neither Dr. Liu’s nor Dr. Hart’s teams declared any conflicts of interest. ■