

Bariatric Surgery Slashes CVD Risk, RCT Needed

BY BRUCE JANCIN
Denver Bureau

ATLANTA — An estimated six obese patients need to undergo bariatric surgery in order to prevent one additional cardiovascular event during the subsequent decade, Dr. John A. Batsis said at the annual meeting of the American College of Cardiology.

That's an extremely low number-needed-to-treat. It makes bariatric surgery—when performed in carefully selected patients at high-volume centers by expert surgeons—one of the most dramatically effective approaches to reducing cardiovascular risk, according to Dr. Batsis of the Mayo Clinic, Rochester, Minn.

He presented a retrospective population-based case-control study assessing bariatric surgery's impact on cardiovascular risk factors.

The investigation involved 197 consecutive Olmsted County, Minn., residents with class II or III obesity who underwent Roux-en-Y gastric bypass and 163 similar-weight controls who didn't have surgery, because of medical or psychiatric contraindications, lack of finances, or personal choice.

All study patients participated in an intensive multidisciplinary behavioral modification program for at least 6 months before a decision was made regarding surgery.

The beneficial effects of Roux-en-Y gastric bypass, which has become the most widely used form of bariatric surgery, were apparent in the cardiovascular risk profiles of these Mayo Clinic patients. (See chart.)

At a mean 3.3 years after the bypass, weight loss in the surgical group averaged 44 kg, representing a 71% reduction in the amount of excess weight. The mean estimated 10-year cardiovascular risk prior to bariatric surgery was 37.1%; at follow-up it was cut in half to 18.3%.

In contrast, 10-year estimated cardiovascular risk was unchanged over time in the control group.

The bariatric surgery group also had reductions of 26% in the need for antihypertensive medications, 61% for lipid-lowering drugs, and 68% for diabetes drugs. In contrast, the use of all these cardiovascular medications increased over time in the control group, Dr. Batsis continued.

No perioperative mortality occurred in the study.

Dr. Batsis and his coworkers created risk models derived from the National Health and Nutrition Examination Survey and other very large data sets in order to estimate bariatric surgery's impact on 10-year outcomes in the Mayo Clinic patients. They projected that 24 obese patients needed to undergo Roux-en-Y gastric bypass in order to prevent one death from any cause. The number-needed-to-treat to prevent one cardiovascular death during 10 years was 34.

As a retrospective study, this must be considered hypothesis generating rather

than definitive. But the recent explosive growth in the popularity of bariatric surgery makes a randomized controlled trial a research priority. Such an investigation would allow physicians and patients to make decisions about whether to undergo major surgery based on real outcomes data rather than mere estimates, Dr. Batsis said. ■

Risk Factor	Baseline	3.3 Years After Gastric Bypass
Body mass index (kg/m ²)	49	34
Blood pressure (mm Hg)		
Systolic	134	121
Diastolic	80	72
Cholesterol (mg/dL)		
Total	198	154
LDL	118	77
HDL	45	55
Percent of patients meeting diagnostic criteria for diabetes	30%	11%

Source: Dr. Batsis

ELSEVIER GLOBAL MEDICAL NEWS

CALLING ALL ADOLESCENTS AND ADULTS

A CALL TO ARMS AGAINST PERTUSSIS

Pertussis protection for adolescents and adults 11 through 64 years of age

Adacel™
Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccine Adsorbed
Arming More People Against Pertussis

Safety Information

ADACEL vaccine is indicated for active booster immunization for the prevention of tetanus, diphtheria, and pertussis as a single dose in persons 11 through 64 years of age.

As with any vaccine, ADACEL vaccine may not protect 100% of vaccinated individuals. There are risks associated with all vaccines. The most common local adverse events include injection site pain, erythema, and injection site swelling. The most common systemic adverse events include headache, body ache, tiredness, and fever. ADACEL vaccine is contraindicated in persons with known systemic hypersensitivity to any component of the vaccine or a life-threatening reaction after previous administration of the vaccine or a vaccine containing the same substances. Because of uncertainty as to which component of the vaccine may be responsible, no further vaccination with the diphtheria, tetanus, or pertussis components found in ADACEL vaccine should be carried out. Because intramuscular injection can cause injection site hematoma, ADACEL vaccine should not be given to persons with any bleeding disorder, such as hemophilia or thrombocytopenia, or to persons on anticoagulant therapy unless the potential benefits clearly outweigh the risk of administration.

Before administering ADACEL vaccine, please see brief summary of full prescribing Information on next page.

sanofi pasteur. Discovery Drive. Swiftwater, Pennsylvania 18370. www.sanofipasteur.us
MKT11510 © 2006 Sanofi Pasteur Inc. 2/06 Printed in USA

sanofi pasteur
The vaccines business of sanofi-saventis Group