

This Week in the Journal

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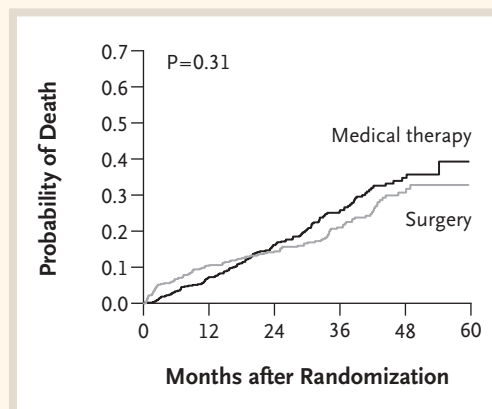
ORIGINAL ARTICLE

Lung-Volume-Reduction Surgery for Severe Emphysema

Pulmonary emphysema results from the destruction of air spaces, with a loss of elastic recoil of the lungs and alveolar capillary surface for gas exchange. In this study, lung-volume-reduction surgery was compared with medical management of emphysema. Surgery had no overall effect on mortality from emphysema. There were identifiable subgroups of patients for whom surgery had either a beneficial or an adverse effect on outcomes.

For most patients with emphysema, lung-volume-reduction surgery offers no survival advantage.

SEE PAGE 2059; EDITORIAL, PAGE 2134; PERSPECTIVE, PAGE 2055



ORIGINAL ARTICLES

A Low-Carbohydrate Diet as Compared with a Low-Fat Diet in Severe Obesity

Severely obese subjects with a high prevalence of diabetes and the metabolic syndrome were randomly assigned to either a low-fat or a low-carbohydrate diet. In this six-month study, an analysis including all subjects indicated that subjects on the low-carbohydrate diet lost more weight than those on the low-fat diet (mean [\pm SD] decrease, 5.8 ± 8.6 kg vs. 1.9 ± 4.2 kg; $P=0.002$) and had greater improvements in metabolic status. However, between-group differences were small for all variables.

Future studies evaluating long-term cardiovascular outcomes are needed before a carbohydrate-restricted diet can be endorsed.

SEE PAGE 2074; EDITORIAL, PAGE 2136; PERSPECTIVE, PAGE 2057

A Randomized Trial of a Low-Carbohydrate Diet for Obesity

In a one-year trial, 63 obese men and women were assigned to either a low-carbohydrate, high-protein, high-fat diet or a conventional high-carbohydrate, low-fat diet. Participants who followed the low-carbohydrate diet had lost more weight at three and six months than those on the conventional diet, but the differences had abated by one year. The low-carbohydrate diet was associated with a greater improvement in some risk factors for coronary heart disease. Adherence to either diet was poor, and dropout rates were high.

Longer and larger studies are still needed to determine the long-term safety and efficacy of low-carbohydrate, high-protein, high-fat diets.

SEE PAGE 2082; EDITORIAL, PAGE 2136; PERSPECTIVE, PAGE 2057

THIS WEEK IN THE JOURNAL

SPECIAL ARTICLE

Cost Effectiveness of Lung-Volume–Reduction Surgery for Patients with Severe Emphysema

On the basis of data from the National Emphysema Treatment Trial, the authors report that over a follow-up period of three years, as compared with medical therapy, lung-volume–reduction surgery cost \$190,000 per quality-adjusted life-year gained. The investigators projected future survival and costs and estimated that surgery would cost \$53,000 per quality-adjusted life-year gained over a period of 10 years.

The long-term cost effectiveness of lung-volume–reduction surgery is not known, but it would compare favorably with other health care interventions only if the benefits were sustained beyond three years.

SEE PAGE 2092; EDITORIAL, PAGE 2134

CLINICAL PRACTICE

Restless Legs Syndrome

A 45-year-old woman reports having had nightly insomnia for years. On further questioning, she reports having uncomfortable sensations in her legs when she lies down at night. She has a feeling of needing to move her legs, which is relieved only by getting up and walking around. How should this patient be evaluated and treated?

SEE PAGE 2103

CLINICAL IMPLICATIONS OF BASIC RESEARCH

Genetic Medicine and Obesity

Common disorders, such as diabetes, asthma, and obesity, run in families but typically have a complex pattern of inheritance. The identification of the relevant genes has been notoriously difficult. A new study, designed to identify “obesity genes” in mice, used a combination of techniques that may help to identify genes that underlie other common disorders.

SEE PAGE 2138

HEALTH POLICY REPORT

The Dilemma of Medicaid

This Health Policy Report discusses recent causes of stress on the Medicaid program. Over the past year, Medicaid has faced more severe fiscal constraints related to state budget crises throughout the country. The Bush administration has proposed restructuring Medicaid to give states more flexibility in the design of their individual programs and establishing caps on federal matching funds available to the states.

SEE PAGE 2140

CORRESPONDENCE

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