Obesity in America

Gerald W. Peskin, MD

The age-adjusted prevalence of obesity (ie, a body mass index [BMI] ≥ 30) in the period 1999-2000 (the last official report by the National Health and Nutrition Examination Survey [NHANES III]) was 30.5% compared with 22.9% in 1980. This increase of 8% is part of a continuing trend. Although all changes were not statistically significant, increases occurred in both men and women in all age groups and of all racial and ethnic backgrounds. Among women, obesity was greatest in non-Hispanic African Americans (>80% being overweight). Thus, there seem to be populationwide changes. The potential health benefits from reduction in obesity are a matter of considerable public health importance.1

Of those in the obese category, 5% are morbidly obese (BMI ≥ 40) or approximately 8 to 9 million Americans; this situation is compounding at a rate of 1% per year. As you can well imagine, morbid obesity leads to many related comorbidities including arthritis, sleep apnea, gallstone disease, hypertension, lipidaemia, diabetes mellitus, cardiac dysfunction, respiratory dysfunction, urinary stress incontinence, menstrual and fertility irregularities, and the increased incidence of certain cancers. Morbidly obese patients die 10 to 15 years earlier than those of a normal weight (approximately 300,000+ deaths in the United States are associated with overweight). In addition to premature death, consequences of obesity include loss of productivity, decreased employability, and social stigmatization.

How do we combat this epidemic? Diet and all entailed in dietary means has, in general, proven itself a failure. Thus, in the 1950s, bariatric surgery became an alternate approach. The techniques of jejunooileal bypass, a malabsorptive procedure, began the cycle that has evolved into the laparoscopic era of the Roux-en-Y gastric bypass, a restrictive operation, and adjustable gastric banding.

This theme issue presents a more detailed evaluation of the problems of obesity and its rise to a prominent position in this country and the world by Kenneth G. MacDonald, Jr, MD, in his essay on the epidemiology of obesity. This is followed by Edward E. Mason, MD, PhD, the most prominent of the early advocates of surgical intervention, detailing his interest in the subject, the factors leading to the development of vertical banded gastroplasty, and the future of this surgical endeavor. Daniel R. Cottam, MD, Samer G. Mattar, MD, and Philip R. Schauer, MD, of Pittsburgh, Pa, bring us into the laparoscopic era (the current rage) of bariatric surgery with their exposition followed by the most successful of the adjustable gastric banding series presented by Paul E. O’Brien, MD, FRACS, and John B. Dixon, MBBS, FRACGP, of Melbourne, Australia (so superior to our own evaluations). Edward H. Livingston, MD, and Aaron S. Fink, MD, present their essay on the quality of life resulting from bariatric procedures and, finally, David E. Cummings, MD, and Michael H. Shannon, MD, expound on the role of ghrelin in the regulation of appetite and body weight with evidence of the diminution of circulating ghrelin levels following Roux-en-Y gastric bypass and an interpretation of this phenomenon in light of various bariatric procedures.
In addition to ghrelin as a short-term signal, Batterham et al² have proposed that the gut hormone, PYY₃-₃₆, physiologically inhibits appetite by signal to the brain. If over the next few years, ghrelin and PYY₃-₃₆ become commercially available in ingestible form, then this may be the wave of the future and surgical treatment, as outlined in this theme issue, may have lost its current momentum. We will wait and see! In the interim, I am hopeful that this group of experts can convince you of the role of surgical intervention in the treatment of morbid obesity.

Accepted for publication December 18, 2002.
Corresponding author: Gerald W. Peskin, MD, Associate Editor, Archives of Surgery, 1411 E 31st St, Oakland, CA (e-mail: archivesofsurgery@earthlink.net).

REFERENCES


Announcement

Online CME to Begin in Mid-2003

In mid-2003, online CME will be available for JAMA/ARCHIVES and will offer many enhancements:

- Article-specific questions
- Hypertext links from questions to the relevant content
- Online CME questionnaire
- Printable CME certificates and ability to access total CME credits

We apologize for the interruption in CME and hope that you will enjoy the improved online features that will be available in mid-2003.