

Summary and Comment

Mortality with Gastric Bypass: Effect of Surgical Volume

Odds for perioperative mortality rose with declining hospital and surgeon volumes.

Complication rates for some surgical procedures are associated with hospital and surgeon volume. In this study, researchers used a hospital-discharge database for all Pennsylvania hospitals to examine the volume-mortality relation for gastric bypass obesity surgery performed from 1999 through 2003.

Hospital and surgeon volumes were categorized as low, medium, or high (<50, 50–100, or >100 procedures annually). After adjustments for demographic variables and comorbidities, mortality was significantly higher for patients treated at low- and medium-volume hospitals than for patients treated at high-volume hospitals (odds ratios, about 2.0 for both in-hospital and 30-day mortality). Surgeon volume also was associated with mortality (ORs for in-hospital mortality, about 3.0 for low- and medium-volume surgeons compared with high-volume surgeons).

Comment: This study documents an association between case volume and mortality for gastric bypass obesity surgery; independent effects of surgeon volume and hospital volume were not teased apart. The authors believe that surgical volume should be used — along with other criteria — to designate formal “centers of excellence” in bariatric surgery. However, a limitation of the analysis is that the database did not include information on body-mass index and other variables that perhaps confound the relation between volume and outcomes.

Published in Journal Watch General Medicine November 20, 2008

Citation(s):

Hollenbeak CS et al. Surgical volume impacts bariatric surgery mortality: A case for centers of excellence. *Surgery* 2008 Nov; 144:736.