Surgical results: a justification of the surgeon selection process for the ACAS trial. The ACAS Investigators.

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Surgical results: a justification of the surgeon selection process for the ACAS trial. The ACAS Investigators.

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Abstract
PURPOSE: The selection of surgeons to participate in a prospective randomized trial comparing the efficacy of a surgical method with medical management is critically important because it will have a direct impact on the outcome of the study and the future use of the operation. We report the success of the method used for selecting surgeons who participated in the Asymptomatic Carotid Atherosclerosis Study (ACAS) by examining the surgical morbidity and mortality rates and the outcome of the study.

METHODS: A Surgical Management Committee established criteria for auditing surgeons who wished to participate in the study. The parameters included a minimum performance of at least 12 carotid endarterectomies (CEA) per year and an audit of each surgeon's last 50 consecutive CEAs with required documentation of a combined neurologic morbidity and mortality rate of <3.0% for asymptomatic patients and <5.0% for all indications including symptomatic patients.

RESULTS: As of February 1991, 164 surgeons from 48 medical centers applied for ACAS participation. One hundred seventeen were approved, and their aggregate experience of 5641 operations yielded a combined neurologic morbidity and mortality rate of 2.3% for asymptomatic and symptomatic patients combined. The morbidity and mortality rate for...
CEA on asymptomatic patients was 1.7%. These surgeons, plus those recruited after February 1991, became investigators in the ACAS trial and were responsible for the surgical care of 825 patients who were randomized to the surgical arm. Seven hundred twenty-four patients actually underwent CEA. One patient (0.14%) died and ten patients (1.38%) had strokes within the 30-day perioperative interval, for a combined stroke or death incidence of 1.52%. The 5-year stroke event rate in the surgical group (including perioperative morbidity and mortality rates) was 5.1%. compared with 11% of patients treated medically, yielding a relative risk reduction of 53% in favor of surgery (p=0.004).

**CONCLUSIONS:** A method for selecting surgeons for participation in the ACAS trial was successful in providing low perioperative morbidity and mortality rates. This materially influenced the outcome of the study in favor of CEA.

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