

The effects of increasing obesity on outcomes after endovascular repair of abdominal aortic aneurism.

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Purpose. To evaluate the influence of obesity on outcomes after endovascular aneurysm repair.

Methods. A retrospective analysis was conducted of 80 patients (77 men; mean age 75.0±7.6 years) undergoing elective EVAR for abdominal aortic aneurysm (AAA) between 2002 and 2009. Patients were stratified on presence of obesity [body mass index (BMI) >= 30 kg/m²]. Outcomes in hospital and during follow-up were compared between obese and non-obese patients.

Results. In this cohort, 26(33%) patients had a BMI >= 30kg/m². Mean BMI in the non-obese group was 25.6kg/m² versus 34.1 kg/m² in the obese group (p<0.001). In obese patients, EVAR operating time was longer compared to non-obese patients : 217 versus 177 minutes (p=0.006). One obese patient died after EVAR (p=0.325); the combined operative mortality and major complication rate was 8% (n=2) in the obese group versus 7%(n=4) in the non-obese group (p=NS). Endoleak occurred in 25% (n=6) of the obese group versus 14% (n=7) of the non-obese group(0.261). Postoperative intensive care for >24 hours(65%b versus 70% , p=0.796) and overall length (p=0.796) of stay (3.9 versus 3.8 days, p=0.845) did not differ significantly; neither did all cause mortality during 2 years of follow-up (p=0.688).

Conclusion. Obesity is associated with extended operation times during EVAR, but increasing BMI appears to have a little influence on outcomes after EVAR. A preferential approach to offering EVAR for obese patients may be reasonable.