**Results:** SR clamping was used in 65 cases (69.15%). There was no difference between the groups related to age and gender: the mean age was 65 years±10.32 (SD) in the SR group including 14 women (21.5%) and 67 years±4 (SD), with a female ratio of 13.8% in the SC group. The groups were similar concerning comorbidities and the classification of the American Society of Anesthesiologists. Thirty-day-mortality was not significantly different: 4.6 % in the SR group and 20.7% in the SC group (p=0.129). In the whole cohort 10 patients required postoperative hemodialysis for acute kidney failure (10.64%); 6.2% and 20.7% in the SR and SC groups, respectively (p=0.044). Significant difference was also found related to pulmonary complications in the perioperative period: 7.7% in the SR group and 27.6% in the SC group (p=0.014). No significant difference was found between the groups related to long-term mortality, length of stay in intensive care unit, cardiovascular complications, lower extremity or bowel ischaemia and early reoperations.

**Conclusion:** We experienced a significantly higher need for hemodialysis and pulmonary complications when supraceliac clamping was required during elective open surgery for juxta- or suprarenal aortic aneurysms. Our results support the usage of open surgery for aneurysms in high volume centers when suprarenal aortic clamping is feasible. Cases compelling supraceliac clamping call for consideration of complex endovascular treatment

**Disclosure:** Nothing to disclose

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**O-016 Long-term Survival After Endovascular Repair for Intact Infrarenal Abdominal Aortic Aneurysms is Improving Over Time**

**Abdominal Aortic Diseases**

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**Introduction:** There is a growing body of literature raising concerns over the long-term durability of endovascular repair (EVAR) for abdominal aortic aneurysms (AAA) and suggesting that long-term outcomes may be better after open AAA repair. However, the data investigating these long-term outcomes largely originate from early in the endovascular era and therefore do not account for increasing clinical experience and technological improvements. Therefore, we investigated whether long-term outcomes after EVAR and open repair have improved over time.

**Methods:** We identified all EVARs and open repairs for intact infrarenal AAA within an international vascular clinical database (2003-2018). We then stratified patients by procedure year into treatment cohorts of four years: 2003-2006, 2007-2010, 2011-2014, and 2015-2018. We used Kaplan-Meier analysis and Cox proportional hazards models to assess whether there was an improvement in EVAR or open repair over time. Additionally, we matched EVAR and open repairs for each time cohort, to investigate whether the relative survival benefit of EVAR over open repair changed over time.

**Results:** We included 40,811 EVARs (increasing from 549 performed between 2003-2006 to 24,059 between 2015-2018) and 9,241 open AAA repairs (increasing from 739 performed between 2003-2006 to 4,273 between 2015-2018). For both EVAR and open repair, median age decreased over time (EVAR: 75 vs. 74 vs. 74 vs. 73, P<.001; open repair: 72 vs. 70 vs. 70 vs. 70, P<.001). Four-year survival increased for the periods 2003-2006, 2007-2010, 2011-2014, and 2015-2018 as 76% vs. 80% vs. 84% vs. 88% for EVAR (P<.001) and 81% vs. 85% vs. 86% vs. 88% for open repair (P=.003; Figure 1). After risk-adjustment, compared to 2003-2006, the hazard ratio (HR) for long-term mortality after EVARs performed between 2011-2014 was 0.64 (95%CI: 0.47-0.88; P=.017) and 0.46 for those performed between 2015-2018 (95%CI: 0.34-0.64; P<.001). In contrast, the risk-adjusted mortality did not decrease for...
From the early to the latest follow-up cohort, we matched 365, 431, 1,339, and 1,211 EVAR to open repair patients. Survival curves for these cohorts are displayed in Figure 2: whereas EVAR and open repair showed similar survival in the first two cohorts, EVAR patients treated between 2011-2014 showed only a survival benefit up to two years, with no difference in four-year survival (P=0.15). However, EVAR patients in the latest cohort experienced a higher survival over the full time period (P=0.02).

Conclusion: Long-term outcomes following EVAR are still improving over time, but not following open repair. Consequently, we found a trend towards higher relative survival rates after EVAR compared to open repair over time. These finding suggests that long-term durability following EVAR may be improving with new generations of endografts and increased experience, information that should be considered by surgeons and policymakers when evaluating the long-term value of contemporary EVAR to open AAA repair.

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O-017 Effect of Depression on Mortality In Individuals With Abdominal Aortic Aneurysm Compared to a General Population — A Prospective Cohort Study: A Hunt Study

Abdominal Aortic Diseases

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Introduction: Depression is associated with an increased risk of mortality in patients with cardiovascular disease. The effect of depression in individuals with abdominal aortic aneurysm (AAA) is sparsely studied. The Hospital Anxiety and Depression Scale (HADS) questionnaire has been used to assess degree of depressive symptoms in several studies. A score ≥8 has a high sensitivity for clinically relevant depression 1. The aim of this study was to investigate if depression has an adverse effect on mortality in individuals with AAA, and to evaluate whether the association differed from that observed in a general population. Data was obtained from the HUNT study which consists of a series of population-based health surveys initiated in the mid 1980s.