

complications in revascularized group; however, we observe some endoleak in patients treated by chimney technique who needed reintervention. **Conclusion:** The theoretical risks of the LSA coverage without revascularization are not constant. However, the revascularization is not free of complications and requires a trained team. The chimney technique had to be improved to get a good result and it also requires a randomized study.

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Global Approaches to Type B Aortic Dissection: Our Experience

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Background: We report our experience in the endovascular treatment of type B aortic dissection. **Methods:** Over a period of 69 months, a total of 41 type B aortic dissections (12 acute, 8 subacute, and 21 chronic dissections) were treated with stent graft in 33 cases and multilayer stents (MLSs) in 8 cases. Our series included 40 patients (One patient was operated for a double location): 9 women and 31 men with an average age of 64.9 years (21–84 years). **Results:** We had 100% technical success. Hospital mortality occurred in one (1.4%) patient. Follow-up was available for 39 patients at a median time of 26.5 months (1–69 months). We had 12 (8% [5/39]) complications: endoleak type II in 2 cases, chimney endoleak in 2 other cases, and 1 case of retrograde dissection. The late mortality rate was 10.2% (4/39). Late computed tomography scans' control was satisfying for acute dissections treated in emergency with stent graft and localized dissections treated with MLS. Regarding the dissecting aneurysms, the false lumen was patent in the abdominal aorta in eight cases with dilatation of the celiac aorta in four cases. **Conclusion:** Endovascular treatment has remarkably improved the prognosis of type B aortic dissections; however, long-term monitoring is mandatory.

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Abdominal Aortic Aneurysm Screening: A Systematic Review and Meta-Analysis of Efficacy and Cost

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Background: Abdominal aortic aneurysms (AAAs) can cause significant mortality when ruptured but are often undiagnosed before this time. Population screening of high-risk individuals and early intervention may mitigate AAA-related mortality. Large trials have demonstrated a mortality benefit for AAA screening, but adoption is not ubiquitous. This study sought to systematically review and consolidate the most recent randomized trial evidence on AAA screening in men and its cost-effectiveness. **Methods:** Randomized trials and cost-effectiveness studies of AAA screening in men were identified from searching Medline, Embase, CENTRAL, and relevant citation lists. Data were extracted as hazard ratios or raw event rates. Meta-analysis was conducted using a random-effects, inverse variance weighted model for continuous variables and Mantel-Haenszel weighting

for event data. Cost estimates of screening were adjusted for inflation and reported as \$US/quality-adjusted life year (QALY). **Results:** Five studies were identified totaling 175,085 participants (age 64–83) with a mean of 10.6 years of follow-up (4.4–13.1). The AAA detection ranged from 3.3% to 7.7%. Screening significantly reduced all-cause mortality (hazard ratio: 0.97, 95% confidence interval [CI]: 0.96–0.99, $P = 0.002$), AAA-related mortality (0.65, 95% CI: 0.48–0.89, $P = 0.008$), and emergent AAA repair (RR: 0.64, 95% CI: 0.46–0.91, $P = 0.02$). The number needed to screen to prevent one AAA-related death per 10 years ranged from 209 to 769 individuals. Sixteen cost-effectiveness analyses found a mean 16,854 \$/QALY (range 266–73,369). **Conclusion:** Wider implementation of population-based AAA screening programs in elderly men should be considered as it continues to demonstrate a significant and cost-effective reduction in all-cause mortality as well as AAA-related mortality.

OC109

Acute Respiratory Insufficiency in Patients with Acute Type B Aortic Dissection: An Indication for Urgent Intervention

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Background: In this series, we examine six patients whom presented with acute Stanford type B aortic dissection with malperfusion and associated acute pulmonary syndrome with pleural effusion and lung disease similar to adult respiratory distress syndrome. Current discussions encourage attempts to stabilize the patient for an interval of 7–14 days to enhance thoracic endovascular aortic repair (TEVAR) outcomes; however, pulmonary compromise signals the need for more urgent intervention. **Methods:** Case Series (reports of new indications for TEVAR). **Results:** All six patients otherwise have no known prior history of chronic lung disease. Two patients presented with lower extremity weakness. One patient presented with spinal ischemia and bilateral lower extremity weakness. The fourth patient presented with acute renal insufficiency. The fifth patient presented with chest and back pain, acute renal insufficiency, and lactic acidosis. One of the five patients required tube thoracostomy placement and intubation. The second patient responded well to noninvasive positive pressure, Bilevel Positive Airways Pressure airway ventilation (BIPAP), and diuresis. The third patient remained intubated until he expired 1-week postoperatively. The fourth patient developed acute pulmonary insufficiency before any operative interventions and died shortly after intubation. The fifth patient's respiratory status markedly improved after intervention. Four patients underwent uneventful TEVAR of their descending thoracic aortic dissections. **Conclusion:** Current discussions encourage attempts to stabilize the patient for an interval of 7–14 days to enhance TEVAR outcomes; however, pulmonary compromise signals the need for more urgent intervention.

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Endovascular Treatment of a Large Iatrogenic Popliteal Arteriovenous Fistula

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