iliac artery, and G3: 51 HA preservation by BBT (iliac limb endograft (ILE) ≥ 20 mm in Ø).

**Results:** Median follow-up was 54 months (33/99/75 months), and the technical success rate was 100%. Early (0%/0.7%/0%) and late (0%/1.4%/2%) related mortality rates, as well as postoperative aneurysm rupture (0%/0.7%/2%) rates, were similar among the three groups (P = NS). Permanent buttock claudication (PBC; 1%/13.5%/2%; P = .0006) and late type II endoleak rates (1%/17%/2%; P < .0004) were significantly higher in G2. Iliac limb migration (ILM; 1%/0%/9.8%; P < .0001) and late type IB endoleak rates (0%/0%/7.8%; P < .0001) were significantly higher in G3. Type III endoleak rates did not differ among the groups (1%/4%/2.0%; P = NS). Iliac limb occlusion (5.7%/7.1%/3.9%) and reintervention rates (7.7%/11%/15.9%) failed to reach statistical significance (P = NS). Most complications and reinterventions occurred within a median follow-up of 18 months. According to multivariate statistical analysis (Cox regression model), bilateral HAE was associated with PBC (P = .03) and late type II endoleak (P = .04). BBT (ILE ≥ 24 mm in Ø) was associated with ILM (P = .01) and late type IB endoleak (P = .01).

**Conclusions:** HAI and BBT are associated with greater complication rates compared with the ST for the treatment of complex aortoiliac aneurysms.

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**IF9.**

**Fenestrated and Branched Stent Grafting for Postdissection Thoracoabdominal Aortic Aneurysms**

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**Objectives:** Secondary aneurysmal degeneration of the thoracoabdominal aorta after acute aortic dissection is a complex scenario. Open repair carries a high surgical risk, and thoracic endovascular aortic repair (TEVAR) is only feasible when the aneurysm is limited to the thoracic aorta. We present our experience with fenestrated/branched TEVAR (F/Br-TEVAR) in the treatment of postdissection thoracoabdominal aortic aneurysms (TAAAs).

**Methods:** A prospectively maintained database including all patients with postdissection TAAAs who underwent F/Br-TEVAR within the period January 2010 to December 2013 was evaluated for initial technical success, operative mortality and morbidity, late survival, endoleak, aneurysm diameter regression, renal function, and reintervention during follow-up (FU).

**Results:** A total of 19 patients (15 male; mean age, 65.2 ± 7.6 years) were treated. Technical success was 100%. Two (10.5%) patients died ≤30 days postoperatively, one of multiple organ failure and one of cardiac decompensation. Temporary spinal cord ischemia occurred in two patients (10.5%), with no case of permanent paraplegia. Mean FU was 10 ± 8 months. There was one late death, aneurysm unrelated. Renal function impairment occurred in one patient (5.3%). Endoleak was diagnosed in eight patients (42%) during FU, including three type Ib sidebranch endoleaks and five type II endoleaks. Three of five type II endoleaks resolved spontaneously. Reintervention was required in three patients (15.8%), all for type Ib endoleak. Mean aneurysm sac regression was 7.2 ± 8 mm, with a false lumen thrombosis rate of 65%.

**Conclusions:** F/Br-TEVAR is feasible for patients with a postdissection TAAA. It is associated with additional technical challenges and need for reintervention. F/Br-TEVAR seems to lead to favorable aneurysm remodeling.

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**IF10.**

**Aortic Diameter Changes After Thoracic Endovascular Aortic Repair for Stanford Type B Dissections: Midterm Results of Single Center**

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**Objectives:** This study assessed midterm results of aortic diameter changes of type B aortic dissection after thoracic endovascular aortic repair (TEVAR).

**Methods:** Between January 2002 and June 2008, 91 patients with type B aortic dissection underwent TEVAR and were followed up by computed tomography angiography (CTA) in our center. The CTA images were used to measure the diameters of aortic, true lumen (TL), and false lumen (FL). Three measurement levels, including A, B, and C, were established for the entire aorta in advance. Level A represented the point located at pulmonary artery bifurcate, level B was located by projecting the first axial section passing through the diaphragm, and level C was located by projecting the first section passing under the left main renal artery. FL thrombosis was analyzed according to the same three levels.

**Results:** After TEVAR, diameters of aortic and FL decreased, whereas TL diameters increased on level A and B significantly. During the follow-up, aortic segments with a thrombosed FL manifested no substantial diameter changes on these two levels. Patent FL caused the increase of substantial diameter on level C. Aneurysmal dilatation was developed on abdominal aorta 2 years after TEVAR.

**Conclusions:** The midterm results of endovascular repair of acute type B dissection is encouraging. A decrease in FL diameters and an increase in TL diameters was noted in the thoracic aorta in most patients. Persistent flow into the FL, mainly due to entry tears at the abdominal level, was the cause of increasing of aortic, TL and FL diameters. Close follow-up is mandatory for patients whose FLs are patent.

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**IF11.**

**Results of Aberrant Right Subclavian Artery Aneurysms Repair: A Contemporary Multicenter Experience**

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Predictors and Outcomes of Endoleaks in the OVER trial

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Objectives: The VA Open Versus Endovascular Repair of AAA (OVER) study is the only federally funded randomized control trial in the United States comparing open vs endovascular aneurysm repair (EVAR) in standard-risk patients with infrarenal abdominal aortic aneurysm (AAA). This subanalysis is to identify risk factors and long-term outcome of endoleaks in patients treated with EVAR in the OVER cohort.

Methods: The OVER trial randomized 881 patients, and 439 received successful EVAR. Logistic regression analysis was used to identify predictors for endoleaks and secondary interventions. Kaplan-Meier survival analysis, longitudinal plots, and generalized linear mixed models methods were used to describe time to endoleak detection, resolution, or death.

Results: A total of 135 (31%) patients developed 187 endoleaks over a mean follow-up of 6.2 ± 2.4 years. Five aneurysms went on to rupture. There was no difference in survival between the patients who developed endoleaks and those who did not. The 187 endoleaks included 76% type II, 12% type I, 3% type III, 3% type IV, and 6% indeterminate. Initial aneurysm size and age >75 years predicted the presence of endoleaks (P < .001), whereas neck length and angulation were not associated with endoleak development. The presence of endoleaks is associated with lack of aneurysm shrinkage (P < .001). Fifty-three percent of endoleaks resolved spontaneously, and 31% received secondary interventions. The initial aneurysm size independently predicted a need for secondary intervention (P < .001). Delayed type II endoleaks (detected >1 year after EVAR) were associated with aneurysm enlargement compared with the early counterpart. There was no difference in aneurysm size or length of survival between the patients who developed endoleaks and those who did not.

Conclusions: We present one of the most comprehensive and longest follow-up analyses of patients treated with aortic endografts in a randomized control trial. Endoleaks are common, and the presence of endoleaks negatively impacts sac shrinkage. Delayed type II endoleaks are associated with late sac enlargement.