petition was not associated with differences in in-hospital mortality or vascular, neurologic or other minor post-operative complications.

Conclusions: Greater hospital competition is significantly associated with increased EVAR adoption at a time when diffusion of this technology passed its tipping point. Hospital competition does not influence post-AAA repair outcomes. These results suggest that adoption of novel vascular technology is not solely driven by clinical indications, but may also be influenced by market forces.

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PS40.

The Hostile Proximal Landing Zone in TEVAR: Does the Snorkel Technique Work?

Ali Shahriari[1], James B. Williams[2]. [1]Cardiovascular Surgery, Indiana Aortic Disease Institute, Indiana University School of Medicine, Indianapolis, IN; [2]Methodist Heart and Vascular Istitute, Peoria, IL

Objectives: One of the major limitations to endovascular treatment of the thoracic aorta is inadequate landing zone (LZ), thrombus or heavy calcification within the LZ. Debranching of the aortic arch vessels has been used as a solution with good results. Stenting of the supra-aortic branches, the "snorkel" technique, has been described with immediate good results but the short to intermediate term outcomes are not well described.

Methods: Between January 2008 and December 2009, 16 TEVARs were performed using the "snorkel" technique for the supra-aortic branches. The indication for using this technique was inadequate LZ, and thrombus within the LZ. The charts were retrospectively reviewed and the patients were followed in the aortic disease clinic.

Results: The mean age of the patients was 62 years (range 46-84). There were 6 (38%) females and 10 (62%) males. The pathologies included aneurysms, chronic type B dissections, and traumatic aortic transections. One (6.3%) snorkel was placed in the innominate artery, 4 (25%) in the left common carotid artery (CCA), and 11 (69%) in the left subclavian artery (SCA). The mean follow-up period is 14 months (range 3-28 months). There was one (6%) death unrelated to the procedure. There were no instances of stroke or paralysis. There were no stent fractures. One (6.3%) stent became occluded a week after implantation and needed to be revised. There was one case of persistent type Ia endoleak.

Conclusions: Placement of endoluminal grafts beyond zone 2 is a more challenging and complicated procedure. These cases require meticulous planning and careful management of the supra-aortic branches. Our short-term results support the use of this technique in appropriately selected cases, to extend the LZ beyond zone 2. Long term results are pending.

Author Disclosures: A. Shahriari: Nothing to disclose; **J. B. Williams**: Nothing to disclose.

PS42.

Does Endovascular Repair of Ruptured Abdominal Aortic Aneurysm Confer Survival Benefits Over Open Repair?

Naveed U. Saqib[1], Taeyoung Park[2], Sun C. Park[1], Robert Rhee[1], Rabih A. Chaer[1], Luke K. Marone[1], Michel S. Makaroun[1], Jae S. Cho[1]. [1]Surgery, University of Pittsburgh, Pittsburgh, PA; [2]Yonsei University, Seoul, Republic of Korea

Objectives: Reports of the superiority of endovascular repair (EVAR) for ruptured abdominal aortic aneurysm (rAAA) suffer from selection bias and limited FU. This study is a single center propensity score comparison of early and midterm outcomes between open repair (OR) and EVAR.

Methods: Retrospective review from 1/2001-11/2010 identified 312 pts who underwent rAAA repairs. 31 with prior AAA repair and 3 with incomplete records were excluded, leaving 37 EVARs and 241 ORs. Propensity score-based matching for sex, age, preoperative hemodynamic status, surgeon's annual AAA volume and comorbidities was performed in 1:3 ratio to compare outcomes. 37 EVARs were matched with 111 ORs. Late survival was estimated by KM curves.

Results: Operative time and blood replacement were higher with OR. Operative mortality was similar (22.2% EVAR vs 34.3% OR) with an odds ratio of 0.56 for EVAR (95% CI=[0.22, 1.30], P=0.18). Overall complication rates were similar (54.3% EVAR vs 68.0% OR), except for more tracheostomies with OR (22.9% OR vs 2.9% EVAR, p=0.018). KM estimates of 1, 2 and 3 year survival rates were similar (48%, 48%, 38.4% EVAR vs 56.4%, 38.8%, 28.2% OR).

Conclusions: EVAR for rAAA does not seem to conclusively confer either acute or late survival benefits.

	EVAR (n=37)	*OR (n=111)*	*P*
Age (years)	75	76	0.6
Male (%)	70.3	68.5	0.99
Operative time (min)	138.8	209.2	<0.0001
Packed Red Blood Cells	3.1	7.4	0.0002
Fresh Frozen Plasma	0.6	3.9	0.002
Platelet	0.3	o.8	0.02

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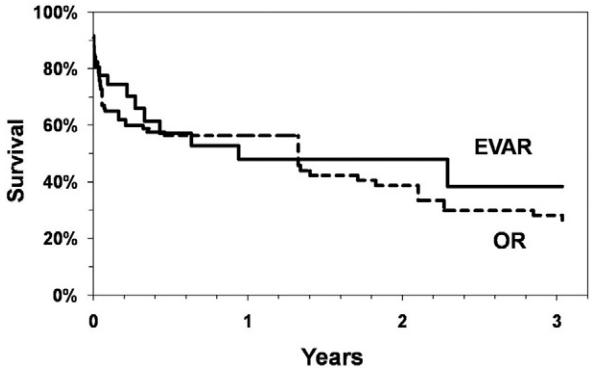

PS44.

Midterm Results of Management of Aortoiliac Aneurysms with Aortouniiliac Devices

Francis Caputo, Raghuveer Vallabhaneni, Yazan Duwayri, Brian Rubin, Patrick Geraghty, John Curci, Jeffrey Jim, Kathleen Raman, Gregorio Sicard, Luis A. Sanchez. Washington University School of Medicine, St. Louis, MO

Objectives: Commercially available Aortouniiliac (AUI) devices are most often described as rescue therapy for complications of endovascular aneurysm repair. They have also been described to be useful in several settings including ruptured AAA and difficult aortoiliac anatomy. We report on the indications and outcomes with AUI devices in a single center.

Methods: We retrospectively identified all patients who underwent AUI repair in a single center during a five-year period. Patients were evaluated for indications of AUI placement, complications of surgery, and overall mortality. Patient demographics, indications for procedure, perioperative outcomes and mortality data were analyzed.

Results: There were 38 patients identified having undergone AUI with femoral-femoral bypass with a mean age of 75.6±8.9 years. Cook converters including the Renu were used in 97% of the cases. The indications were elective aneurysm repair with anatomic constraints (47%), complications of previous EVAR (29%), rupture (13%) and aortoiliac occlusive disease (11%). Of those patients who underwent elective aneurysm repair 35% had concomitant iliac aneurysms and 29% had occlusive disease in the aortoiliac system. Non-aneurysm related mortality was 26% within the five year period. Of the patients alive, the mean overall follow-up is 28 (9-62) months. There were no aneurysm related deaths identified. There was an 18% complication rate. Of those complications identified, 1 was a major endoleak requiring secondary intervention. The remaining complications included femoral wound infections (n=3), femoral-femoral bypass occlusion (n=2) and pulmonary complications (n=1).

Conclusions: AUI devices are an effective treatment for aortoiliac aneurysms with challenging anatomy, rupture, or as rescue endoluminal therapy. They may also have a role in patients with aortoiliac occlusive disease. Further research is needed to delineate this patient subset.

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PS46.

Frequency of Thoracic and Abdominal Aortic Aneurysms in Patients Treated for Popliteal Aneurysms

Rebecka Hultgren, Angelika Horna Strand, Emma Larsson. Dep. Vasc Surg, Karolinska University Hospital, Karolinska Institutet, Stockholm, Sweden

Objectives: The high proportion of patients with popliteal arterial aneurysms (PAA) that suffer from abdominal aortic aneurysms (AAA) 9-64% is wellknown, and a high proportion of AAA patients also suffer from TAA (25%).The proportion of persons with concurrent PAA; AAA and TAA has not been investigated previously. One major obstacle in the analysis is the poorly established definitions for PAA and TAA. The primary aim was to analyse the prevalence of concurrent aneurysms; PAA, TAA or AAA in a cohort of patients treated for PAA.

Methods: Charts for all persons treated for acute and elective repair for infrainguinal disease (operation/thrombolysis) at the Karolinska University Hospital 2004-2010 were investigated, persons treated for PAA were included (n=70). Diagnosis; AAA: AP maximum diameter 3 cm, TAA; according to radiological diagnosis. Only treated PAA are included.

Results: 3/70 were women. Mean age was 71 years among 29 persons treated for unilateral PAA (41%) vs 73 years in 41 persons treated for bilateral PAA (59%) p=0.08.

39/70 had AAA (56%). More patients with bilateral than unilateral PAA had AAA (68% vs 37%, p=0.01). 9/70 had TAA (13%), all with concurrent AAA. 7 (10%) have TAA, AAA and bilateral PAA, mean age; 79 years, vs 71 years, p=0.005.

Conclusions: More than 10% of persons with PAA also have TAA and AAA, high age increases the risk for concurrent aneurysms. An underestimation of the diagnosis TAA and PAA is highly plausible, and higher prevalence rates of multilevel aneurysm disease can be expected if special at-