aorta (sAAA). The natural history of these sAAs and whether they affect the results of EVAR are unknown.

Methods: 470 patients in the M2S database were identified as having an infrarenal abdominal aortic aneurysm (iAAA) with a concomitant sAAA (diameter 2.9-4.7cm). Patients with a preoperative CTA and follow-up imaging ≥12 months (n=239) were included in the analysis. Patients who did not undergo EVAR served as a control (C) (n=81). Patients with EVAR were subdivided into suprarenal fixation (SR) (n=94) and infrarenal fixation(IR) (n=64). Standard measurements from the M2S images were extracted, and growth rates were calculated for different abdominal aortic segments.

Results: The average follow-up was 32.1 ± 19.8 months. The average initial size and growth rate of the sAAA was 34.50 ± 3.31 mm and 0.56 ± 1.35 mm/yr for patients undergoing EVAR (SR+IR) compared with 36.68 ± 3.67 mm (P<.05) and 0.60 ± 2.87 mm/yr (P=17) for controls. Following EVAR, 1.8% of patients (SR-1/94=1.1%; IR 1/64=1.6%) experienced sAAA growth to a diameter ≥50mm which was not significantly different from the control group (4/81=4.9%, P=.09) and occurred at a mean of 43.5 months (range 9.8-59.4). Comparing the SR and IR groups, there was no difference in the preoperative sAAA diameter (SR 34.66 ± 3.09 mm, IR 34.26 ± 3.61, P=.75). Postoperative sAAA growth rate (SR 0.56 ± 1.20 mm/yr, IR 0.55 ± 1.55, P=.98), aortic growth rate at the renal (SR 1.00 ± 1.81 mm/yr, IR 0.90 ± 1.50, P=.69), iAAA growth rate (SR -1.68 ± 5.79 mm/yr, IR -1.38 ± 5.09, P=.73), and iAAA change in volume (SR -10.58 ± 34.65 mL/yr, IR -6.11 ± 29.14, P=.40) were also not significantly different.

Conclusions: Isolated treatment of iAAA via EVAR with a concomitant sAAA is acceptable as the endograft (suprarenal or infrarenal) does not affect growth rates of the sAAA. Standard EVAR follow-up is all that is required as only a small minority demonstrate growth.

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S3: SVS Plenary Session III

SS13.

Obstruction of the Endurant Endograft Post-EVAR: Incidence and Treatment Results

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Objectives: The Endurant endograft was specially developed to broaden the treatment range for EVAR in patients with complex aortoiliac anatomy. Preliminary reports showed excellent outcome concerning migration and type Ia endoleaks, but occurrence of post-EVAR obstruction has not been determined in a large patient cohort with midterm follow-up (FU).

Methods: Data of all consecutive patients treated with the Endurant from December 2007 to April 2011 in 3 Dutch tertiary referral hospitals were prospectively gathered. FU consisted of regular office visits, and 12 months CT-scans, and annual duplex scanning thereafter. Patients with either a symptomatic stenosis or complete occlusion of the Endurant endograft were identified.

Results: 428 patients (88.3% male, mean age 73 years (range 47-89)) were treated. Median FU was 12 months (range 0-43). 22 obstructions occurred in 21 patients (4.9%), either of the main body of the graft (n=3), a limb (n=18) or unknown (n=1). Median time to obstruction was 6 months (range 0-22), with 27.3% occurring >12 months post-EVAR. Presenting symptoms were acute ischemia (40.9%, Rutherford 2A-B) or non acute (59.1%). The latter were mainly claudicants without rest pain, and diagnosed at regular FU. Treatment was surgical (63.6%) or percutaneous (18.2%), the remainder was left untreated due to mild clinical complaints. Initial treatment was successful in 19 of 22 obstructions (86.4%), but re-obstruction occurred in 6 (31.6%). In 40.9% of obstructions a graft related complication (kinking, stenosis or collapse) was found. Mortality due to obstruction of the endograft was 0.7% (3/428) in all patients, and 14.3% (3/21) in the obstruction group; 2 patients died because of ongoing ischemia, and 1 patient died intra-operatively due to bleeding.

Conclusions: Endurant endograft obstruction occurred in 4.9% of 428 patients, and continued during FU. It is an important complication that must be considered in expanding the indications for EVAR.

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VS3.

Video Presentation

Removal of Suprarenal Fixing Aortic Stent graft and In Situ Aorto-iliac Reconstruction for a Patient with Aortic Stent Graft Infection after EVAR

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