

#8 **AORTIC ANEURYSM SAC SHRINKAGE AFTER
ENDOVASCULAR REPAIR IS DEVICE DEPENDENT**

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Introduction : Aneurysm sac shrinkage after endovascular aneurysm repair (EAR) provides objective evidence of successful aneurysm exclusion and absence of endotension. Attainment of this outcome parameter may be device dependent.

Methods: 169 patients underwent EAR with an AneuRx (N=118) or Zenith (n=51) endograft at a single institution. A prospectively maintained database was examined for significant changes in aneurysm sac diameter (≥ 5 mm) based on CT measurements at 6 and 12 months follow-up. The possible impact of endoleak on sac shrinkage was also assessed. Patients were excluded if their EAR was performed for isolated iliac, saccular, or pseudo-aneurysms, or if follow-up data were incomplete. Data are mean \pm S.E.

Results: Significant aneurysm sac shrinkage (≥ 5 mm) occurred in 73.1 % (19/26) vs. 43.1% (28/65) of patients in the Zenith and AneuRx groups, respectively, at 12 months (P=.032). At 6 months follow-up, sac shrinkage rates were 51.4% (19/37) vs 25.8% (16/62) in the Zenith and AneuRx groups, respectively (P=.036). Mean reduction of sac size was 7.6 ± 1.6 mm vs. 3.5 ± 0.8 mm in the Zenith and AneuRx groups, respectively, at 12 months (P=.01). Preoperative AAA size was 57.0 ± 1.0 mm and 57.5 ± 1.3 mm in the AneuRx and Zenith groups, respectively (P=NS). The presence of any endoleak (≥ 1 month post-op) was higher in those patients who did *not* shrink [27.3 % (12/44)] when compared to those who *did* experience shrinkage [12.8 % (6/47)] (P=.08).

Conclusions: Patients treated with the Zenith endograft demonstrated a significantly higher rate and amount of aneurysm sac shrinkage when compared to patients treated with AneuRx. Endoleaks negatively influenced shrink rates with both endografts.