

## 12. Increased Original Excluder Component Overlap Not Correlated With Aneurysm Sac Shrinkage

Gale L. Tang, MD, Mark F. Fillinger, MD and Jon S. Matsumura, MD  
 From: Division of Vascular Surgery, Northwestern University, Chicago, IL and  
 Lebanon, NH

**OBJECTIVES:** The original Gore Excluder endograft has been associated with late aneurysm sac expansion over time from transgraft ultrafiltration of hygroma fluid. This has been treated by relining the graft with original or low-permeability components. We asked whether increased component overlap of the original graft material would be protective against aneurysm sac expansion.

**METHODS:** CT scans from subjects (n=120) receiving the original Gore Excluder from the pivotal trial were measured for total distance of graft overlap (including contralateral gate, proximal extension, or distal extension overlap) based on MMS CT scan reformation. This was compared to change in aneurysm sac diameter (as measured by the core laboratory) at the latest time point available. Patients were omitted if they were missing CT scan data (n=10), their graft was explanted (n=3), they underwent an intervention for endoleak and did not have diameters available after their intervention (n=4), or if they had a continued endoleak that could account for an increase in aneurysm sac diameter (n=11). This left 23 patients with more overlapping components than the baseline contralateral limb/gate overlap and 69 patients with baseline overlap.

**RESULTS:** Subjects with increased component overlap were not protected from aneurysm sac expansion as they were evenly divided between aneurysm sac increase in diameter and decrease in diameter (see Figure 1).

**CONCLUSIONS:** Graft overlap involving multiple original components is not protective against aneurysm sac expansion due to to transgraft ultrafiltration. This suggests that either transgraft ultrafiltration is not impeded by having partial double layers of original material. All patients who received the original Excluder and have late aneurysm sac expansion in the absence of endoleak should have as complete relining as feasible with low permeability components if sac shrinkage is the surrogate goal.

