

LETTERS TO THE EDITOR

Regarding “Endograft migration one to four years after endovascular abdominal aortic aneurysm repair with the AneuRx device: A cautionary note”

I have read with interest the manuscript entitled, “Endograft migration one to four years after endovascular abdominal aortic aneurysm repair with the AneuRx device: A cautionary note.” The authors describe 15 device migrations in 91 patients with a minimum of 1-year follow-up and have reported an alarmingly high rate of migration of 67% at 4 years. Based on these results, the authors recommend continued careful surveillance for this endograft failure mode. I agree that continued surveillance of endografts for long-term failure modes is necessary.

Why did the authors choose a cumulative event rate where only three patients have 4-year follow-up instead of a Kaplan-Meier analysis to determine the true incidence of migration over time? Of the 91 patients treated at the Oschner Clinic with the AneuRx stent graft, only 5 patients (5.4%) have required treatment for migration to date. In the “Methods” section, to avoid any confounding variables, any individual experiencing migration was excluded from further analysis after the event date. However, patients who migrated earlier but had follow-up at a later date were included in calculations of cumulative risk of migration. Thus, it appears that some patients were counted twice. A total of 15 patients migrated, but in cumulative risk there are a total of 25 cases of migration.¹ Do the authors believe that the risk of migration is 67% at 4 years? I strongly disagree with this statistical analysis and believe that a Kaplan-Meier analysis would have been more appropriate. Can the authors comment and give the freedom of migration using this statistical method?

The length of fixation is of critical importance in preventing migration. In this series the device was placed low. This is demonstrated in Table II where the neck length was 25.9 ± 2.5 mm in migrators and 27.0 ± 1.6 mm in nonmigrators. However, the overall graft overlap was only 18.6 ± 2.6 mm and 19.4 ± 1.4 mm in migrators and nonmigrators, respectively.¹ Thus, the device was placed almost 1 centimeter, on average, below the renal arteries. Typically, it is this first 10 mm that is the healthiest portion of the proximal aortic neck. Is better technique available to prevent migration by more accurate placement? We typically will not pull the runners until the contralateral gate is cannulated and the limb deployed to avoid any downward pulling of the device at the initial implantation. Furthermore, we routinely adjust the fluoroscopy unit during the main body deployment to place the device just at the level of the renal arteries.

Migration is preventable by good patient selection, appropriate graft selection, and proper positioning of the graft.^{2,3} In our own experience at Stanford, migration has occurred in 6.5% (17/260) patients over 6 years with four patients requiring conversion to open surgical repair.⁴ Surgical conversions were the result of poor patient selection or poor graft positioning, including the neck being too angulated ($n = 1$), the neck being too short ($n = 1$), the neck being too wide ($n = 1$), and the graft being placed too low ($n = 1$).

I enjoyed reading the author’s manuscript and find it an important contribution to the literature on aortic endografting.

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REFERENCES

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