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**On the Cover**

**What’s the diagnosis?** This hemodialysis patient presented with swelling of the left neck veins (top images), which resolved after angioplasty (bottom images). A left upper arm brachial-axillary prosthetic access had been placed in 2003. In 2008, he presented with enlarged left neck veins and total occlusion of the left brachiocephalic vein which did not resolve with angioplasty alone. A 12×40 mm nitinol stent was placed (visible on angiographic images), and over the following 26 months he underwent 6 angioplasties with intervals shortening to less than 4 weeks. A 11×50 mm stent graft was inserted without recurrence of the stenosis thus far for 8 months. Both devices were used off-label. Preceding the left upper arm access a left internal jugular vein tunneled catheter was used for over one year. Central vein stenoses are often associated with previously present tunneled hemodialysis catheters on the side of a dialysis access. Central vein stenoses chronically recur and require repeated angioplasties. Uncovered stents can reduce the frequency of angioplasties. Large diameter stent grafts for use in central veins have only recently become available, thus no long-term outcomes data is available on their use. (Image and text provided by Dr. Dirk Hentschel, Brigham and Women’s Hospital)