**Main SCVS Site** 

**Annual Meeting Home** 

**Preliminary Program** 

**Exhibitors & Sponsors** 

**Fellows Program** 

Incoming Fellows Program

**Top Gun Program** 

Young Vascular Surgeon's Program

**Past & Future Meetings** 



Search Meeting Site Only

## Back to 2016 Karmody Posters

Bovine carotid artery grafts have an acceptable patency for hemodialysis access regardless of sex or weight

**Danielle M. Pineda, MD**, Matthew J. Dougherty, MD, Michael C. Wismer, BA, Chelsea Carroll, BS, Douglas A. Troutman, DO, Keith D. Calligaro, MD. Pennsylvania Hospital, Philadelphia, PA, USA.

Objective: Bovine carotid artery (BCA) grafts have been described as a possibly superior alternative to expanded polytetrafluoroethylene (ePTFE) hemoaccess grafts. However, published experience remains very limited, and patency of non-autogenous arteriovenous (AV) grafts remains unsatisfactory. We report our experience with BCA grafts and compare our series to those in the literature.

Methods: We retrospectively reviewed 133 BCA grafts (Artegraft, North Brunswick, NJ) implanted for hemodialysis access in the upper extremities between January 2012 and May 2015. Patients had a mean of 1.75 prior access surgeries. Primary, assisted-primary, and secondary patency were calculated using the Kaplan-Meier method, and longitudinal infection risk was tabulated. Patency differences were calculated using the log-rank method.

Results: For the entire group, one-year primary patency was 26%, assisted-primary patency was 55%, and secondary patency was 71%. Nine of 133 patients (6.7%) developed graft infection requiring graft excision between 1 - 9 months after implant. There was no statistical difference between males and females in primary or secondary patency (25% vs. 21%, p=.838; 67% vs 61%, p=.62, respectively). There was no statistically significant discrepancies in patency between BMI greater or less than 30 (primary 20% vs. 34%, p=.417; secondary: 70% vs. 59%, p=.584). Conclusion: This represents the largest published series of BCA grafts for AVG. Our primary patency results using BCA grafts was lower than that reported in a smaller randomized study demonstrating superiority to PTFE, but assisted-primary patency was similar. Infection rates in our series appears somewhat lower than PTFE infection rates reported in the literature. Despite anatomic differences, there is no difference in patency between males and females. BCA may be a satisfactory alternative to ePTFE for HD access, but larger controlled studies are needed to determine whether superior patency is a reproducible finding.

Back to 2016 Karmody Posters











© 2016 Society for Clinical Vascular Surgery . All Rights Reserved. Privacy Policy.

1 of 1 3/21/16 1:50 PM