



Shaping Tomorrow's Nephrology: Insight-Driven Kidney Care

KSN SEOUL, KOREA
2026

The 46th Annual Meeting of the Korean Society of Nephrology



Jun 11 (Thu) – 14 (Sun), 2026

COEX, Seoul, Korea

Abstract Type : Oral presentation

Abstract Submission No.: A-0649

Abstract Topic : Interventional Nephrology

Imaging and Patient Satisfaction in Nephrology: Exploring the Relationship between Doppler AVF Performance and Patient-Reported Outcomes.

Danish Selvaraj Dhanapal, Adisakthi K, Manish Lalwani, Vinoi George David

Department of Internal Medicine-Nephrology, Christian Medical College Vellore, India

Objectives : to assess the association between Doppler-derived AVF parameters and patient-reported vascular access satisfaction using the Short Form Vascular Access Questionnaire (SF-VAQ).

Methods : In this single-center cross-sectional analytical study, 100 adult patients undergoing maintenance hemodialysis with a functioning AVF for ≥ 4 weeks were evaluated over a 10-day period. Doppler ultrasonography measured minimum and maximum venous diameter, depth from skin surface, and blood flow. Patient-reported satisfaction was assessed using the 13-item SF-VAQ, scored on a 7-point Likert scale with higher scores indicating greater dissatisfaction. Associations between Doppler parameters and SF-VAQ scores were analyzed.

Results : The mean age of participants was 54.45 ± 15.49 years. Radiocephalic AVF was the most common access type (60.2%). No significant correlation was observed between Doppler parameters and total dissatisfaction score. Female sex was associated with higher physical symptom scores ($r=0.340$, $p=0.001$) and worse social functioning ($r=0.240$, $p=0.024$). Dialysis vintage correlated positively with minimum venous diameter ($r=0.313$, $p=0.003$) and maximum venous diameter ($r=0.383$, $p<0.001$). The social functioning domain demonstrated significant correlations with minimum venous diameter ($r_s=0.262$, $p=0.014$), maximum venous diameter ($r_s=0.236$, $p=0.027$), and blood flow ($r_s=0.329$, $p=0.002$). In multivariable regression analysis, AVF type was the only independent predictor of overall dissatisfaction ($\beta=0.334$, $p=0.008$) and disease-related concern ($\beta=0.332$, $p=0.010$), with radiocephalic AVF associated with higher dissatisfaction scores.

Conclusions : Objective Doppler-derived AVF parameters were not associated with overall vascular access dissatisfaction among patients receiving maintenance hemodialysis. However, improved vascular performance correlated with better social functioning. AVF type independently predicted dissatisfaction and disease-related concerns, highlighting the importance of considering access configuration in patient-centered vascular access planning.

vascular access questionnaire (2).jpg



Shaping Tomorrow's Nephrology: **Insight-Driven Kidney Care**

KSN **SEOUL, KOREA**
2026

The 46th Annual Meeting of the Korean Society of Nephrology



Jun 11 (Thu) – 14 (Sun), 2026

COEX, Seoul, Korea

Short Form Vascular Access Questionnaire (SF-VAQ)

Each patient assigns a score on a 7-point Likert scale for each item. For question 1, which assesses overall satisfaction with vascular access, a higher score indicates greater satisfaction. In contrast, for questions 2 through 14, a lower score signifies greater satisfaction

Item No.	Question	1	2	3	4	5	6	7
1	I am satisfied with my vascular access.							
2	During the past 4 weeks I was bothered by pain associated with my vascular access.							
3	During the past 4 weeks I was bothered by bleeding associated with my vascular access.							
4	During the past 4 weeks I was bothered by swelling associated with my vascular access.							
5	During the past 4 weeks I was bothered by bruising associated with my vascular access.							
6	During the past 4 weeks my access interfered with my daily activities.							
7	During the past 4 weeks I was bothered by the appearance of my vascular access.							
8	During the past 4 weeks my access interfered with my sleep.							
9	During the past 4 weeks my access caused me problems with bathing or showering.							
10	During the past 4 weeks my vascular access had problems (did not work properly).							
11	During the past 4 weeks my vascular access was difficult to care for.							
12	During the past 4 weeks I was worried about being hospitalized because of problems with my access.							
13	During the past 4 weeks I was worried about how long my vascular access would last.							
14	Pain during cannulation Scale of (1-10)							