

P174

## P174 -Arteriovenous fistulas aneurysms in a UK dialysis population

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### Introduction:

Aneurysms within native arteriovenous fistulas (AVF) for dialysis do not occur infrequently and necessitate surveillance, can require surgical intervention and could potentially impact on patients significantly. The effect of aneurysms on the patients has not been previously examined.

### Methods:

A quality improvement project examining patient reported outcomes and experience with regards to their vascular access and the vascular access service was undertaken at 10 units supported by the University Hospital Birmingham nephrology service. Patients answered questions relating to the Vascular Access Questionnaire (VAQ) via a structured interview. Native AVF aneurysms were recorded and comparison undertaken between the scores for the VAQ between different aneurysm types (Valenti classifications).

### Results:

Of the total population of AVF (539) 36.2% were aneurysmal (n=195). The distribution of morphology in the cohort was 1a (3.5%), 1b (3.9%), 2a (16.9%), 2b (10.2%) and 3 (1.7%). The type of AVF was 50.7% Brachiocephalic, 39.4% Radiocephalic and 9.9% Brachiobasilic. The aneurysm rates were not found to differ significantly across the AVF types, with rates of 38.4%, 34.1% and 35.8%, respectively (p=0.626). Analysis of the VAQ score found no significant difference between AVFs that were aneurysmal vs. non-aneurysmal, with means of 5.22 vs. 4.99 (p=0.811, with lower scores indicating higher satisfaction). Analysis of the components of the score found bruising (mean: 0.24 vs. 0.34, p=0.029) and clotting (0.07 vs. 0.18, p=0.004) scores to be significantly lower in aneurysmal AVFs, whilst the appearance score was significantly higher (0.65 vs. 0.25, p<0.001). Rates of aneurysms were also found to differ significantly (p=0.028) between the 10 units ranging from 19% to 49%.

### Conclusions:

Despite the impact of aneurysms in terms of physical appearance the overall satisfaction of patients with their fistulas does not seem influenced by the presence of an aneurysm. Particularly of note is the differences between the 10 units in terms of prevalence of aneurysm. Whether this is linked to needling practice remains uncertain but certainly requires further study.