

An appraisal of renal vascular access outcomes in Dumfries and Galloway Renal Unit during COVID 19 pandemic

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Introduction

Dumfries and Galloway Renal Unit established a link with Glasgow transplant surgery team to provide outreach vascular access services to renal patients in D&G since January 2020. We looked at our vascular access activity and outcomes since January 2020 for one calendar year. Timely access planning leads to better patient outcomes and we aim to achieve the targets set out by the UK renal association for renal vascular access within our unit. Renal Association UK recommends that 80% of prevalent haemodialysis patients do so via a functioning arteriovenous fistula (AVF) or an arteriovenous graft (AVG).

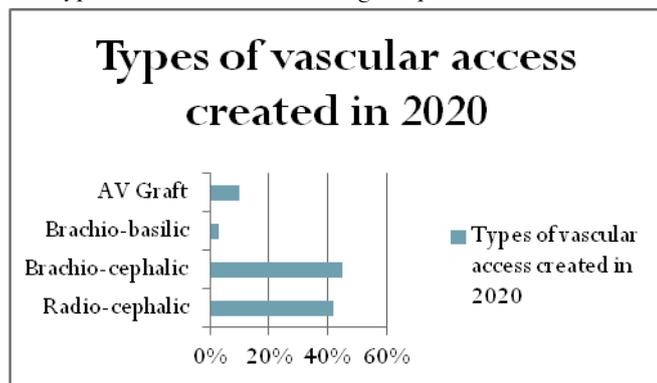
Methods

Patient records were assessed for new arteriovenous fistulas created since January 2020 among patients attending dialysis in Mountainhall (the main dialysis unit) and the two satellite units (Kirkcudbright and Stranraer).

Results

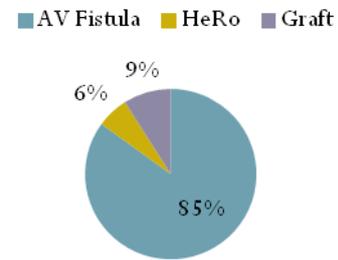
A total of 28 fistulas were created over the 12 months. An unassisted fistula maturation rate of 68% was achieved. A further 7% was successfully cannulated following intervention. 32% of those who underwent fistula creation had pre-existing diabetes mellitus. However, 75% of arteriovenous fistulas created on these patients achieved unassisted fistula maturation.

The types of access created during the period

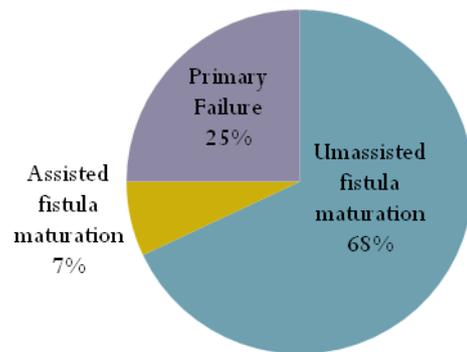


2016 the AVF & AVG/Tunnelled haemodialysis catheter split in Dumfries was 80/20%. In 2017 it was 82/18%. In 2018 it was 78/22%. In 2019 it was 69/31% and in 2020 the average split was 63/37%.

Vascular Access



AVF Success/Failures



Conclusion

Despite a well planned outreach service from the Queen Elizabeth university Hospitals in Glasgow there was a direct impact on the renal vascular access services in Dumfries due to Covid-19 Pandemic. Routine fistula creations had to be cancelled for most part of the year with urgent procedures sent up to Glasgow. However, majority of vascular accesses created in 2020 were successful despite disturbances to routine services. The increased use of tunnelled dialysis catheters is a direct result of limitations to routine vascular access procedures and an unusual number of late presenters for dialysis.

References

<https://renal.org/sites/renal.org/files/C10-Dialysis-access.pdf>

Lok C.E, Huber T.S, Lee T. et al. KDOQI Clinical Practice Guideline for vascular access :2019 update. American journal of Kidney Disease 2020 75: 4; S2