

# Avoiding the Need for Dialysis Lines: Outcomes of Pre-Emptive AVF Formation – A Single Centre Retrospective Analysis

Raja Mohammed Kaja kamal<sup>1</sup>, Nelomi Anandagoda<sup>1</sup>, Ankan Mittal<sup>1</sup>, Maggi Steele<sup>1</sup>, Bhriugu Raj Sood<sup>1</sup> and David Mankanjuola<sup>1</sup>.

<sup>1</sup>South West Thames Renal Unit, St. Helier University Hospital NHS Trust, Carshalton, Surrey, United Kingdom.

## Introduction

The native arteriovenous fistula (AVF) remains the preferred choice of haemodialysis access, with evidence of better outcomes than in those who dialyse through dialysis lines. The UK guidelines recommend creation of dialysis access at least 6 months before the anticipated start of dialysis and that 65% of all incident HD patients should commence dialysis with an AVF.

## Methods

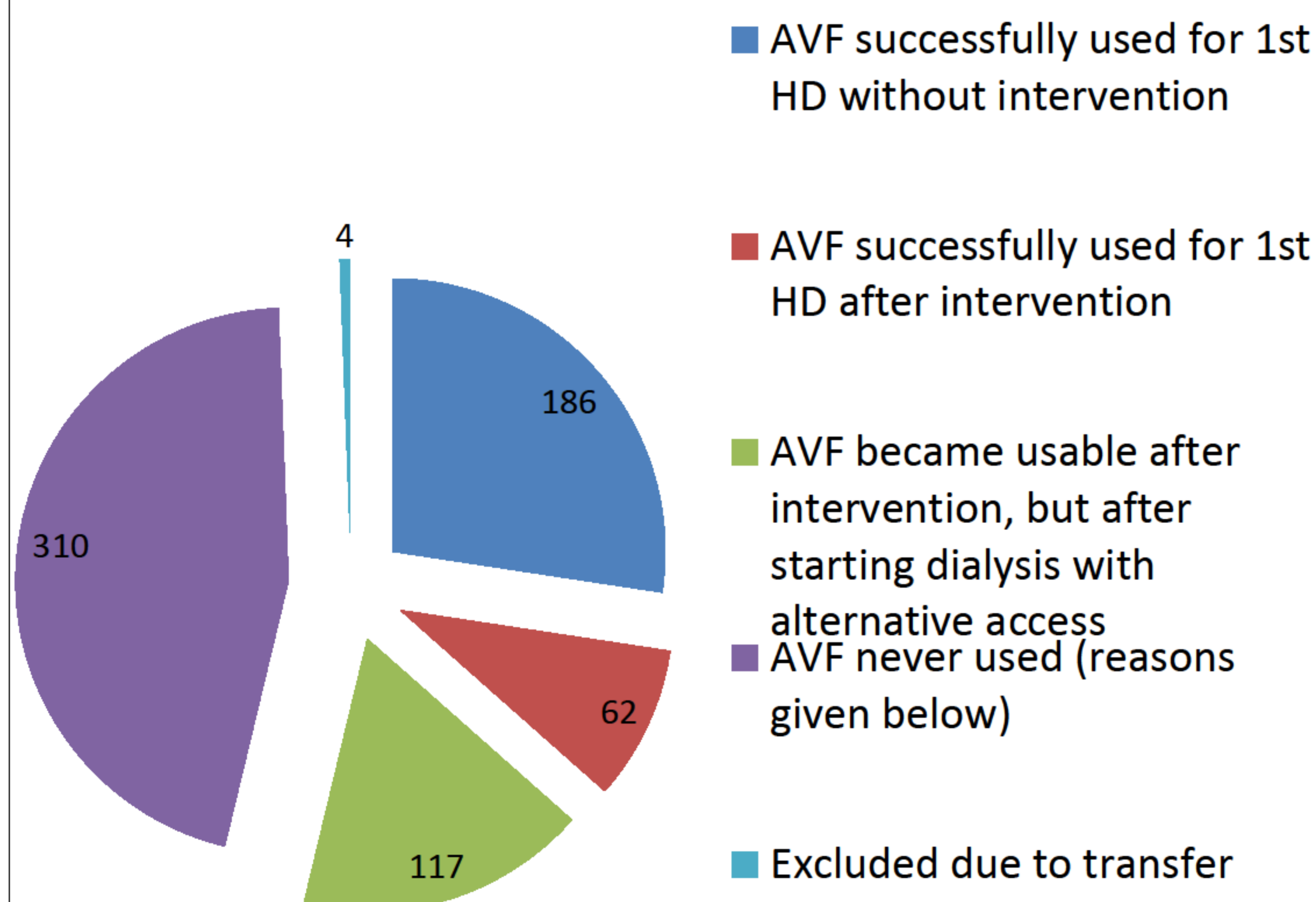
This single centre retrospective study looked at the outcomes of patient undergoing pre-emptive AVF/graft surgery between Jan 2006 and Oct 2012. Data were collected from our renal and pathology databases. Outcomes were analysed for:

- successful use
- need for surgical or radiological intervention prior to use of the AVF/graft
- the impact of the eGFR at the time of AVF/graft creation.

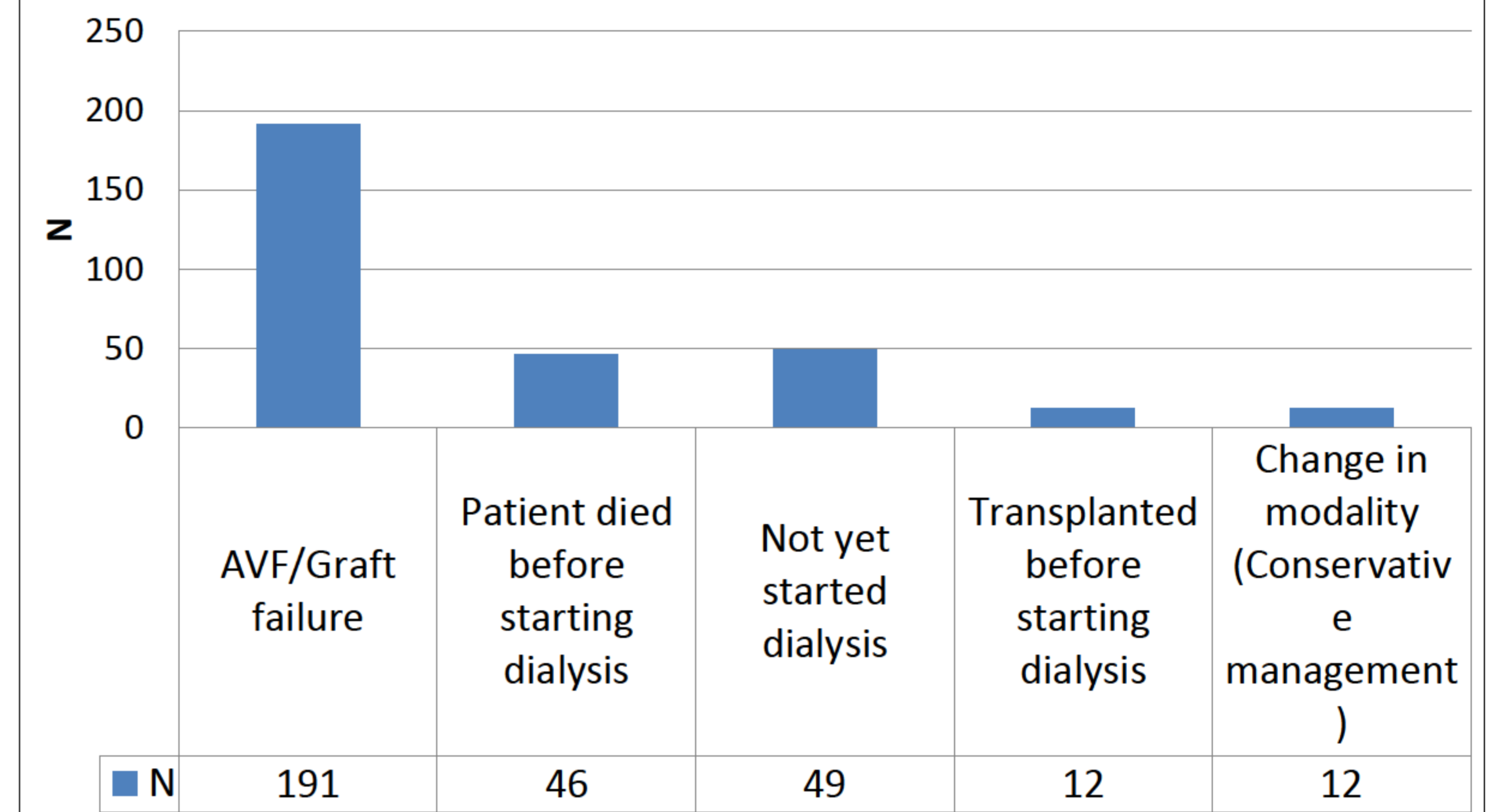
## Results

Number of pre-emptive AVF/graft procedures (N) = 741

### Outcomes following access surgery



### Reasons for not using AVF



### eGFR (ml/min) at time of creation of AVF

	Mean	Median	Range
AVF used successfully with or without intervention	12.1	12	3-48
AVF never used	14.6	14	4-60

## Discussion

This large single centre study shows that only 33% of AVF/grafts were used successfully for the first HD session. In 24% of cases, the AVF/graft was eventually used, but the patients had to start dialysis with a line. In 42% of cases, the AVF/grafts were not used at all and over half of these were due to AVF/graft failure.

The eGFR at time of creation of the AVF/graft did not have any impact on whether they were able to be used for dialysis.

Only 25% of AVF/grafts were usable at the start of dialysis without any intervention. This is comparable to other published literature and it reinforces the point that planning is important, so that if interventions are required to enable the access to be used, there is enough time for this to be done before the need to start dialysis.

Those who died, or switched to conservative management also need to be looked at in greater detail, as it suggests that they may have had an unnecessary procedure performed.

No conflict of interest.

Email Contact: drkrmkk@doctors.net.uk

