

Preventing Fatal Vascular Access Haemorrhage in Elderly or Disabled Dialysis Patients – Risk Factors and Practical Solutions

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Introduction

Fatal Vascular Access Haemorrhage (FVAH) is one of the feared complications of haemodialysis access, with a global annual incidence of 0.4%. It is usually due to detachment of a scab, with the majority of bleeds occurring out of hospital. Education on the signs of vascular access (VA) at risk of bleeding is the cornerstone of prevention. It is also crucial that patients and carers are trained on immediate action to be taken in the event of a bleed. Guidelines on managing life threatening haemorrhage from VA were circulated by the British Renal Society in 2018 and implemented by early 2019. An elderly nursing home resident suffered a severe bleed from an arteriovenous fistula (AVF) during 2018. This prompted a review of our haemodialysis patients' understanding of and physical ability to manage a bleed occurring out of hospital.

Objectives

The primary objective was to assess patients' level of understanding of managing bleeding from their VA out of hospital. The secondary objective was to identify the reasons why patients were less able to manage a VA bleed out of hospital and then to develop individual measures to minimise the risks.

Methods

All haemodialysis patients dialysing via a fistula or graft (VA) were interviewed by dialysis nurses in May 2019. They were asked 5 questions with a mutually exclusive answer (yes or no) and results were analysed.

The following questions were asked:

1. Do you know what to do if your fistula/graft starts bleeding?
2. Can you read and follow the advice from the information leaflets?
3. Are you able to apply pressure on your fistula/graft when it bleeds?
4. Do you live alone?
5. Do you have access to telephone?

Results

All patients with VA (n=285) were interviewed across all dialysis sites within our renal service. Results showed that all patients had access to a telephone and 60 (21%) lived alone. Three patients (1%) did not know what to do if their VA started bleeding. 10 patients (3.5%) were unable to read and follow advice from the information leaflets. 9 patients (3%) had visual impairment. 17 patients (6%) were physically unable to apply adequate pressure to their fistula, 2 of whom lived alone.

Conclusion

Our study shows the importance of assessing each patient's ability to apply pressure to their fistula, especially in the context of their individual social circumstances. It highlights a small proportion of patients who would struggle to control a bleed from their VA because of frailty, comorbidity or living alone. There are currently no standard guidelines on effective preventative strategies in this setting. These patients and

their carers are likely to benefit from an individualised management plan and ongoing education to minimise the risks associated with dialysing via a fistula or graft. We recommend a variety of practical actions which can be taken and would be applicable to all dialysis units.