

Caring for diabetic patients on unit haemodialysis: a quality improvement project based on Joint British Diabetes Society guidelines

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Introduction

Diabetes is the leading cause of CKD and ESRD in the UK 1. Both diabetes and CKD are associated with significant morbidity and mortality, and combined, even more so 1; for example suffering with greater frequency for foot ulcers 2. Management of patients with diabetes occurs in both primary and secondary care; the structure of services vary across the UK and previous reports have found that patients have frequently fallen in the gap, with no consistent diabetes care from either sector 3. Anecdotally, this situation is compounded for patients who require dialysis, some of whom report having no regular review of their diabetes management. Guidelines published in 2016 by Joint British Diabetic Societies, with the RA highlighted these “organisational difficulties that patients with diabetes on regular hospital haemodialysis experience and the great need for the organisation of their care to be better managed.”⁴. These guidelines cover items including organisation of care, assessment of glycaemic control, anti-diabetic therapies and dietary recommendations.

Methods:

Using these guidelines we audited practice at our Haemodialysis Unit. It is a 24 bed, NHS-run dialysis unit, serving around 100 haemodialysis patients. We first conducted the audit in 2018 and again in 2019 after implementing changes. The data was collected by a Renal Registrar and the HD Unit diabetes link nurse, by patient interviews and electronic records.

Results:

There were 29 patients with diabetes in 2018 and 25 in 2019. Key results are shown in Figure 1. In 2018 we found that a proportion of our patients had no regular diabetic review (28%), were unaware of the importance of heel relief during dialysis, not having at least annual foot reviews, and were not having regular blood glucose (BG) checks pre- and post- dialysis treatment. Positively, every patient was having regular dietetic review, provided by the Renal Dieticians

We implemented simple measures to help improve the areas which had been particularly poor. These included:

- Making patients aware of the role of the diabetes link nurse
- Brief education for patients, provided verbally by the auditing doctor, and re-enforced later by the HD unit diabetes link nurse. This included the importance of using heel relief and encouraging patients to be pro-active in taking care of their diabetes
- Re-labelling the treatment folders so that diabetic patients were easily identified by dialysis nurses
- Co-ordinating with the hospital podiatry team to ensure regular podiatry checks are done on the haemodialysis unit

In 2019 key areas had improved (more frequent BG monitoring, regular podiatry review and increased use of heel relief), but there were still a number of patients who reported having no annual diabetic review and HbA1C levels have increased out of desired range (>68 mmol/mol) in a small proportion: 15% in 2018, 20% in 2019.

Conclusion:

There are still areas which could be improved, notably co-ordination of care to ensure all patients have a diabetic review annually. We hope these changes will contribute to reducing foot ulceration particularly.