

# Enhancing diabetes support for renal transplant recipients with diabetes

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The Imperial College Renal and Transplant Centre (ICRTC) currently treats approximately 3000 people with end-stage renal failure, including approximately 1500 renal transplant recipients. The transplant clinics are notably large, seeing approximately 2000 people per month, one-third of whom have diabetes.

It is difficult to meet the needs of so many transplant recipients with diabetes. Furthermore, the number of individuals treated at the ICRTC increases each year and there has been no formal or regular input from a member of the diabetes team.

## Rationale

Good glycaemic control is central to the management of renal transplant recipients with diabetes and is difficult to achieve without significant input from a multidisciplinary diabetes service. Poor glycaemic control increases the risk of infection and therefore possible organ rejection, and also reduces overall survival rates (Revanur et al, 2001). In general, long-term poor diabetes control in this group is associated with a poorer outcome following transplant. Therefore, they require good accessible diabetes services in tandem with their renal treatment.

Assessment of the clinical practice at the ICRTC revealed a need for change as there

seemed to be an influx of referrals from the renal team to the diabetes nurses. These referrals were investigated over a 2-month period to validate these assumptions. Only data for renal transplant recipients were recorded for this purpose. Analysis showed that the number of referrals was indeed growing.

It was recommended that a DSN should work in the renal transplant clinic 1 day per week to support the diabetes care of these individuals. Initially, the referrals to a DSN came directly from the renal clinicians within the clinic.

Criteria for referral were:

- New-onset diabetes after transplant (NODAT).
- Pre-existing diabetes.
- Suspected impaired glycaemia.

Support given by the DSN centred on optimisation of glycaemic control, help and guidance for new diagnosis of diabetes, education and overall management of diabetes.

At the onset of the implementation of this new service, measures of success were identified, the principal one being improvement in glycaemic control.

## Positive endpoints

At the end of the first 6-month period of the new service, an assessment of glycaemic control was made and it was found that there was an overall reduction in the average

HbA<sub>1c</sub> level from 8.4% (68 mmol/mol) to 7.8% (62 mmol/mol) in the individuals seen by a DSN. This translates to a risk reduction of approximately one-third for developing diabetes-related complications in this group (UK Prospective Diabetes Study Group, 1998). Of all the individuals referred during this period, 77% were found to have reduced or acceptably stable HbA<sub>1c</sub> levels.

Another positive benefit noted was the earlier diagnosis of NODAT achieved, thus treatment could be commenced sooner.

## Conclusion

Many factors affect HbA<sub>1c</sub> levels and within this specific group of renal transplant recipients with diabetes there are possibly even more owing to a variety of external factors. These include graft rejection, infections and alterations in immunosuppressant medications. However, with intensive diabetes management improved glycaemic control can be achieved. Although this type of intensive support can be time-consuming for the DSN, the outcomes have proven to be effective within a short time scale in this complex group. ■

Revanur VK, Jardine AG, Kingsmore DB et al (2001) *Clin Transplant* 15: 89–94

UK Prospective Diabetes Study Group (1998) *Lancet* 352: 837–53

## The IMPROVE™ Control Campaign

The Global Task Force on Glycaemic Control is a group of physicians and specialists in the field of diabetes from around the world that is working in collaboration with Novo Nordisk with the ultimate aim of identifying and developing practical solutions to the global problem of poor glycaemic control in people with diabetes. Since early 2008, the *Journal of Diabetes Nursing* has featured articles and submissions under the banner of IMPROVE™ Control – a global public awareness campaign focused on the need for improved control, as part of the Task Force's work. Throughout 2011, the journal will continue to bring you articles on the barriers to good glycaemic control, and submissions from you, our readers, outlining the strategies you have used to help people with diabetes improve their control.

For example, perhaps you have implemented a new educational session in your area that has helped break down barriers to control, or maybe you have set up a new referral pathway that has helped improve HbA<sub>1c</sub> levels. The *Journal of Diabetes Nursing* would like to help you share your practical solutions for improving control, no matter how big or small, with other nurses working in diabetes. We encourage you to take part in this global initiative by calling 020 7627 1510, or emailing [jdn@sbcommunicationsgroup.com](mailto:jdn@sbcommunicationsgroup.com).

