Editorial

Therapeutic Options for Diabetes Control in End-Stage Renal Disease Patients with Diabetic Nephropathy

Diabetic nephropathy (DN) is considered as the most common cause of End-Stage Renal Disease (ESRD) in developed countries,[1] and it is also rapidly becoming a disease of major concern in Nigeria. Despite a comparatively poorer outcome of renal transplantation in diabetics compared with non-diabetic subjects, renal transplantation with or without pancreas transplantation is considered as the most preferred treatment option in patients with diabetic nephropathy, since it provides survival advantage and better quality of life, compared with long-term dialysis. [2,3]

Post-transplantation however, worsening of glycaemic control could occur in view of the metabolic side effects of some of the antirejection drugs such as steroids or calcineurin inhibitors. Data from the United Renal Data System evaluating more than 11,000 patients demonstrated that patients with diabetes have a 63% increase in the risk of graft failure, 46% risk of death-censored graft loss and 87% risk of mortality.[4] Therefore, the management of diabetes mellitus post-transplantation is crucial towards achieving a favourable patient and graft outcomes in transplant patients.

Options for management of diabetes post-transplantation include Lifestyle modification, usage of pharmacotherapy (oral hypoglycaemic agents and insulin therapy), and pancreas transplantation. In addition to these modalities, the use of modified immunosuppressive regimens may be required to improve glycaemic control in the patients.

Various pancreas transplantation procedures are available for patients with diabetic nephropathy. These include Simultaneous pancreas-kidney transplantation, Pancreas transplantation after-kidney transplantation, Pancreas transplantation alone and Pancreatic Islet Transplantation. The major aim of pancreas transplantation is to achieve euglycaemia in type 1 diabetes mellitus with complete independence from insulin therapy.

In this edition, Dr. Omisanjo and his colleague reviewed the specific indications, risks, benefits and outcomes of the various pancreas transplantation options available for the treatment of diabetic nephropathy.

Useful as these options are, unfortunately, a robust cadaveric transplantation program is required as most pancreas for transplantation come from deceased donors. Cadaveric transplantation is yet to be established in Nigeria, making pancreas transplantation as an option for the management of diabetic patients with End-Stage Renal Disease a futuristic option in Nigeria.

References.

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