Addressing cardiovascular risk factors can help to improve access to, and outcomes of, kidney transplantation

A review [1] published in Nephrology Dialysis Transplantation (NDT) during the ERA-EDTA Congress in Copenhagen highlights the importance of controlling all metabolic risk factors for cardiovascular disease in every potential kidney transplant candidate, both before and after transplantation. Review author Dr Umberto Maggiore, Parma University Hospital, commented: “By the time the patient is offered a kidney transplant, it may be too late to address their risk of cardiovascular disease. Interventions aimed at controlling metabolic abnormalities therefore need to be initiated early in the course of chronic kidney disease. In our review we provide many practical advices concerning interventions before and after transplantation.”

Metabolic risk factors for cardiovascular disease are common in kidney transplant candidates and recipients, and include abnormal glucose regulation, obesity and metabolic syndrome, dyslipidemia, metabolic bone disease, hyperuricemia and several ‘non-traditional’ factors. Prolonged exposure to these risk factors may reduce access to transplantation by increasing the risk of developing comorbidities while on the waiting list, prolong time to waitlisting, and in some patients, eventually jeopardize their suitability for transplantation or increase their risk of post-operative complications. After kidney transplantation, metabolic risk factors may be associated with a greater risk of death and shorter renal graft survival. The adverse effects of drugs given to prevent rejection may exacerbate these negative outcomes which, however, may be prevented by undertaking appropriate therapeutic measures.

The review sets out the evidence for interventions to address metabolic risk factors before and after kidney transplantation and provides many practical advices for the clinicians. Dr Maggiore explained: “Each patient’s metabolic and cardiovascular risk profile should be assessed, followed by interventions designed to ameliorate these risks.” In kidney transplant candidates, interventions include support for lifestyle measures, such as physical exercise and maintenance of a healthy weight, and interventions aimed at preventing the development of vascular calcifications such as correction of hyperphosphatemia. Following kidney transplantation, metabolic abnormalities resulting from the adverse effects of
antirejection therapy can be controlled by lifestyle measures and judicious use of drug therapy to regulate glucose metabolism and dyslipidemia, which should be prescribed after taking into account of factors such as potential drug-to-drug interactions and degree of renal graft function.


About ERA-EDTA
With more than 7,500 members, the ERA-EDTA ("European Renal Association – European Dialysis and Transplant Association") is one of the biggest nephrology associations worldwide and one of the most important and prestigious European Medical Associations. It supports basic and clinical research in the fields of clinical nephrology, dialysis, renal transplantation and related subjects. It also supports a number of studies as well as research groups and has founded a special "Fellowship Programme" for young investigators as well as grant programmes. In order to involve young nephrologists in all its activities, ERA-EDTA has created the "Young Nephrologists' Platform" (YNP), a very active committee whose board includes members who are 40 years old or younger. In addition, it has established various working groups to promote the collaboration of nephrologists with other medical disciplines (e.g. cardiology, immunology). Furthermore, a "European Renal Best Practice" (ERBP) advisory board was established by the ERA-EDTA to draw up and publish guidelines and position statements. Another important goal of the ERA-EDTA is education: The series of CME courses combined with the annual congress offer an attractive scientific programme to cover the need for continuous medical education for doctors working in the fields of nephrology, dialysis and transplantation. The association's journals, NDT (Nephrology, Dialysis, Transplantation) and CKJ (Clinical Kidney Journal), are currently the leading nephrology journals in Europe; furthermore NDT-Educational is the online educational journal of the society, with free access for all users, as well as being a very important and useful feature of the NDT-Educational "Literature Review". The ERA-EDTA Registry is a large epidemiologic database comparing countries by assessing nephrology practices throughout Europe. ENP, the European Nephrology Portal, is the latest new initiative of ERA-EDTA, where all those interested in the activities of the Society can find everything that is happening, all in one place. Finally, ERA-EDTA is a member of the European Kidney Health Alliance (EKHA), a consortium of patients, nurses and foundations relating to renal issues that actively interacts with the European Parliament. For more information, please visit www.era-edta.org