A pre-emptive kidney transplant is still the best option for patients with kidney failure

A new analysis [1], published in Nephrology Dialysis Transplantation during this week’s ERA-EDTA Congress in Copenhagen, confirms that a kidney transplant before start of dialysis extends the life of both the patient and the transplanted organ. However, for patients who do not receive a preemptive transplant, the length of time they spend dialysis (dialysis vintage) no longer appears to reduce their life expectancy after transplantation. Lead author Professor Rainer Oberbauer, Medical University of Vienna, said: “There are no randomized controlled trials proving that preemptive kidney transplantation is the preferred treatment for eligible patients with end-stage renal failure. This recommendation is, however, reasonable for patients of all ages based on currently available observational studies if we take their limitations into account.”

Kidney transplantation improves quality of life and is cost effective in the long term. It therefore seems obvious that a kidney transplant before the start of dialysis is also the best option to prolong the lives of both the patient and the transplanted kidney (graft). Preemptive kidney transplantation is indeed recommended where possible for patients with kidney failure by all guidelines. This advice is, however, not based on gold-standard evidence from randomized controlled trials, but on a few older studies with considerable limitations. In addition, there is conflicting evidence whether dialysis vintage adversely impacts graft and patient survival after kidney transplantation.

Professor Rainer Oberbauer and colleagues reviewed the most recently published evidence on pre-emptive transplantation and the link between dialysis vintage and outcomes. The best evidence was for preemptive transplantation, which was associated with a lower risk of actual graft loss (including through death) compared to non-preemptive transplantation. The association between preemptive transplantation and functioning graft survival (excluding death as an event) was marginal, however, when the analysis included only patients who had been registered preemptively but then received or did not receive a preemptive transplant.

In older studies, there was an association between dialysis vintage and graft survival, but this link is no longer apparent in transplants performed in the last decade.
There was a graded association between dialysis vintage and patient survival in most of the newer studies, but the impact on functioning graft survival was unclear. The association between dialysis vintage and death after transplantation also varies between countries, probably because it depends on the median dialysis duration of people on the transplant waiting list, as well as national waiting times for a deceased-donor kidney.

Professor Denis Fouque, Editor in Chief of Nephology Dialysis Transplantation commented: “Clinical practice must take into account factors such as quality of life on dialysis or local waiting times for transplantation that are rarely reflected in large dataset studies. Ultimately, preemptive transplantation and waitlisting for a transplant must be individualized based on a discussion with the patient that takes into account all relevant factors.”


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