

Certain factors linked with kidney function recovery in children on dialysis

September 20 2018



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Children with kidney failure due to certain diseases may regain kidney function and therefore no longer need dialysis, and kidney transplantation might be postponed. The findings, which appear in an upcoming issue of the *Clinical Journal of the American Society of Nephrology* (CJASN), may help clinicians better allocate scarce donor

kidneys to pediatric patients.

Although [kidney failure](#) is often irreversible, a small percentage of patients who need dialysis to stay alive regain [kidney function](#). To study this issue in children, Marjolein Bonthuis, Ph.D. (ESPN/ERA-EDTA Registry, Amsterdam UMC, University of Amsterdam, in the Netherlands) and her colleagues analyzed data for 6574 patients from 36 European countries who started dialysis before the age of 15 years between 1990 and 2014.

Within two years after dialysis initiation, 130 patients (2%) experienced enough recovery of their [kidney](#) function to stop dialysis, and the median time to such recovery was 5 months. Compared with patients with congenital anomalies of the kidney and urinary tract, recovery more often occurred in patients with vasculitis, ischemic kidney failure, and hemolytic uremic syndrome. Younger age and initiation on hemodialysis instead of peritoneal dialysis were also associated with recovery. For 42 patients (32%), recovery was transient, as they returned to dialysis or underwent [kidney transplantation](#) after a median recovery period of 19.7 months.

"Kidney transplantation is regarded the optimal treatment for children with end-stage kidney disease and pediatric nephrologists try to reduce the time on dialysis and schedule kidney transplantation as early as possible. However, we found that in children on [dialysis](#) with specific kidney diseases, as well as in very young children, recovery of the native kidney function was much more likely," said Dr. Bonthuis. "Therefore, the opportunity of recovery should be considered when planning early kidney transplantation in these children. Transplantation might be postponed in these children and scarce donor kidneys could be saved for later times or for other recipients."

More information: "Recovery of Kidney Function in Children

Treated with Maintenance Dialysis," *Clinical Journal of the American Society of Nephrology* (2018).

Provided by American Society of Nephrology

Citation: Certain factors linked with kidney function recovery in children on dialysis (2018, September 20) retrieved 30 April 2024 from <https://medicalxpress.com/news/2018-09-factors-linked-kidney-function-recovery.html>

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