

The Renal Association UK Renal Registry



Dialysis and Transplantation in Children in the UK in 2015

Severe chronic kidney disease (CKD) is rare in childhood but when it occurs, renal replacement therapy (RRT) is needed to substitute the role of the kidneys. This may be in the form of dialysis (blood cleaning) or a kidney transplant. In the UK in 2015, there were 941 children aged under 18 receiving RRT compared with 61,256 adults. A total of 137 new patients started RRT. These children were managed in 13 kidney units for children across the UK. The main cause for needing RRT was being born with kidneys that did not form properly.

In 2015, for every 100 children treated for severe CKD, 75 had received a kidney transplant and 25 were on dialysis (13 receiving haemodialysis and 12 peritoneal dialysis). One in three children that started RRT and presented 'early', received a kidney transplant before dialysis was needed: this is called a pre-emptive transplant. This proportion of pre-emptive transplant has remained stable for 10 years. This does not include children who presented 'late' with kidney disease, as there was not sufficient time to plan for a pre-emptive transplant before it was needed. Research is ongoing to understand whether late presenting children could be identified at an earlier stage of their disease.

Blood tests show children's kidney transplants are working well overall. Half of children with a transplant receive a kidney from a live donor and half from a deceased donor. At the time that young people move onto an adult kidney unit, 90 out of every 100 have a working kidney transplant.

Children on dialysis grow poorly. Those with a transplant had better growth but were still shorter than healthy children. Children on dialysis weighed less than healthy children, whereas children with a transplant had a similar weight to healthy children. However, almost half of all children with renal transplants were classed as overweight or obese (as they were shorter than their healthy peers) compared to one in five children on dialysis.

Survival with severe kidney failure is improving although it was lower for very young children (under two years) and those on dialysis compared to transplant. In addition to kidney problems, one in four children had another medical condition. This can make their care more complicated. In 2015, for every 100 children with kidney failure, 75 had one or more risk factors for stroke or heart disease, and of these 75, seven had three or more risk factors. We need more research to help understand the importance of these risk factors and what can be done to improve their control in children.

For the full annual report chapters, please visit the UKRR website:
www.renalreg.org/reports/2016-nineteenth-annual-report/