**Self-Management Support in CKD: Patients’ Viewpoints**

Patients with chronic kidney disease (CKD) need a "multimodal, person-centered framework" to support self-management, with a special focus on everyday strategies, according to a study in *BMC Nephrology*.

The randomized, multicenter trial included 713 critically ill children with confirmed hyperglycemia, excluding cardiac surgery patients. Patients were assigned a target blood glucose range of 80 to 100 mg/dL (tight glycemic control) or 150 to 180 mg/dL. The study included continuous glucose monitoring with explicitly guided insulin adjustments. The main outcome of interest was number of ICU-free days up to day 28.

Recruitment was halted at 50% enrollment when data and safety monitoring suggested a low chance of benefit plus evidence of possible harm. On intention-to-treat analysis, median number of ICU-free days was about 19 in both groups. Secondary outcomes—including mortality, severity of organ dysfunction, and ventilator-free days—were similar as well. Evidence of harm in the tight glycemic control group included an increased risk of healthcare-associated infections: 3.4% versus 1.1%. Patients assigned to the lower glucose target were also at higher risk of severe hypoglycemia (less than 40 mg/dL): 5.2% versus 2.0%.

Previous studies have found no clinical benefit of tight glycemic control in critically ill adults or in children after cardiac surgery. The new results find no improvement in outcomes with a blood glucose target of 80 to 110 mg/dL in critically ill children without cardiac surgery. Tight control may also increase the risk of adverse outcomes, including hypoglycemia and catheter-associated bloodstream infections [Agus MSD, et al. Tight glycemic control in critically ill children. *N Engl J Med*. January 24, 2017; DOI: 10.1056/NEJMoa1612348017].

**No Benefit of Tight Glycemic Control in Critically Ill Children**

Tight glycemic control—with a blood glucose target of 80 to 110 mg/dL—does not improve outcomes for critically ill children, concludes a trial in *The New England Journal of Medicine*.

The randomized, multicenter trial included 713 critically ill children with confirmed hyperglycemia, excluding cardiac surgery patients. Patients were assigned a target blood glucose range of 80 to 100 mg/dL (tight glycemic control) or 150 to 180 mg/dL. The study included continuous glucose monitoring with explicitly guided insulin adjustments. The main outcome of interest was number of ICU-free days up to day 28.

Recruitment was halted at 50% enrollment when data and safety monitoring suggested a low chance of benefit plus evidence of possible harm. On intention-to-treat analysis, median number of ICU-free days was about 19 in both groups. Secondary outcomes—including mortality, severity of organ dysfunction, and ventilator-free days—were similar as well. Evidence of harm in the tight glycemic control group included an increased risk of healthcare-associated infections: 3.4% versus 1.1%. Patients assigned to the lower glucose target were also at higher risk of severe hypoglycemia (less than 40 mg/dL): 5.2% versus 2.0%.

Previous studies have found no clinical benefit of tight glycemic control in critically ill adults or in children after cardiac surgery. The new results find no improvement in outcomes with a blood glucose target of 80 to 110 mg/dL in critically ill children without cardiac surgery. Tight control may also increase the risk of adverse outcomes, including hypoglycemia and catheter-associated bloodstream infections [Agus MSD, et al. Tight glycemic control in critically ill children. *N Engl J Med*. January 24, 2017; DOI: 10.1056/NEJMoa1612348017].

**Does HLA-Incompatible Kidney Transplant Improve Survival?**

For highly sensitized patients on the UK transplant waiting list, HLA-incompatible (HLAi) kidney transplantation does not improve survival, compared to patients who remain on dialysis, reports a study in *The Lancet*.

From more than 25,500 patients on the UK transplant waiting list, the researchers identified 213 patients who underwent HLAi kidney transplantation from 2007 through 2013. Two-thirds of the recipients were female. Median age at transplantation was 44 years and median calculation reaction frequency 96%.

The HLAi transplant recipients were matched in a 1:4 ratio to patients who had a similar degree of sensitization and were listed for deceased-donor transplantation during the same period. Patient survival was compared between the HLAi and matched cohorts, with follow-up through 2014.

Of the 852 patients in the matched cohort, 41% had still not received a transplant at 58 months’ follow-up. Overall survival was not significantly different for the HLAi transplant patients versus those in the matched cohort, either listed or transplanted. The HLAi transplant group consistently had the lowest death-censored graft survival: 68% at 5 years, compared to 89% for those with compatible living donors and 77% for those with compatible deceased donors.

More than 40% of patients on the UK kidney transplant waiting list are HLA-sensitized, and this group has a much longer waiting time compared to unsensitized patients. Desensitization followed by HLAi transplantation is an option, but there are limited data on patient survival.

This matched cohort study provides a “circumspect view” of the outcomes of HLAi kidney transplant in the United Kingdom. Survival is similar to that of sensitized patients who remain on dialysis while awaiting a compatible kidney, many of whom are unlikely to receive a transplant. The authors note that their findings contrast with a recent US multicenter study [Manook M, et al. Post-listing survival for highly sensitized patients on the UK kidney transplant waiting list: a matched cohort analysis. *Lancet*. 2017; doi: 10.1016/S0140-6736(16)31595-1].

**High Prevalence of Diabetes among People with HIV**

Diabetes is present in one-tenth of US adults being treated for HIV infection, suggests a study in *BMJ Open Diabetes Research & Care*.

The researchers compared the weighted prevalence of diabetes in two populations from nationally representative studies: 8610 HIV-infected adults from the Medical Monitoring Project and 5604 general population subjects from the National Health and Nutrition Survey (2005-10 data from both studies). Diabetes was assessed as a physician diagnosis or use of medications for diabetes.

The unadjusted prevalence of diabetes among HIV-positive adults was 10.3%, compared to 8.3% in the general population sample. On adjusted analysis, diabetes prevalence was 3.8% higher in HIV-infected adults. Subgroups of HIV-positive subjects showed even larger differences: 5.0% in women, 4.1% in those aged 20 to 44, and 3.5% in nonobese subjects. Factors independently associated with diabetes in the HIV-positive population included older age, obesity, longer time since HIV diagnosis, and geometric mean CD4 cell count.

As patients with HIV infection live longer, they are at risk of chronic metabolic and cardiovascular diseases. The new study shows that US adults with HIV infection have an increased prevalence of diabetes compared to the general population.

Adults with HIV are more likely to develop diabetes at younger age and in the absence of obesity. The authors suggest further studies to determine whether HIV should be regarded as an additional risk factor for diabetes, and to identify optimal treatment strategies for HIV-positive diabetic patients [Hernandez-Romieu AC, et al. Is diabetes prevalence higher among HIV-infected individuals compared with the general population? Evidence from MMP and NHANES 2001–2004. *BMJ Open Diabetes Research & Care*. 2017; 5:e000304. doi: 10.1136/bmjdrc-2016-000304].