Standardizing Blood Pressure Measurements to Enhance Renal Transplant Outcomes

Cindy Richards, BSN, RN, CNN, Children's of Alabama, Birmingham, AL
Paige Perry, BSN, RN, UAB Department of Pediatric Nephrology, Birmingham, AL
Michael Seifert, MD, UAB Department of Pediatric Nephrology, Birmingham, AL
Daniel Feig, MD, UAB Department of Pediatric Nephrology, Birmingham, AL
Leslie Hayes, MD, UAB Department of Pediatric Critical Care, Birmingham, AL
Gwen Gardner, MS, RN, Children's of Alabama, Birmingham, AL
Karlene Pietsch, BSN, RN, CCTC, Children's of Alabama, Birmingham, AL
Lequette Hunter, CA, Children's of Alabama, Birmingham, AL

Problem: Pediatric renal transplant recipients have a decreased life expectancy when compared to their peers. One area that can affect their outcomes is cardiovascular disease. Improperly measured blood pressures and thus untreated/ undertreated hypertension are one area that can have a direct effect on their overall health as well as their cardiovascular health.

Approach: Our transplant center developed an interprofessional group to better define how blood pressures should be measured and reported. This group included: MD's, clinic RN's, Transplant Coordinators, and Certified Nursing assistants. Education was provided on appropriate blood pressure measurements for children, using the most current International Pediatric Hypertension Association's (IPHA) recommendations, including measuring arm circumference, how to choose the appropriate cuff size, and a pathway for repeating, documenting, and notifying the MD of the elevated blood pressure to assure the patient is being properly treated if they are found to be hypertensive.

Results: Prior to initiating this pathway, only 54% of our renal transplant recipients were having their blood pressures properly remeasured manually to verify they were hypertensive. Our goal was to increase that number to at least 80%, and we surpassed that goal.

Conclusion: By using an interprofessional group and having input from the entire team to develop this standardized process, we have improved our measurement and treatment of hypertension in our pediatric renal transplant recipients, and thus hopefully decreasing their risk of cardiovascular disease.

Abstract selected for presentation at ANNA National Symposium, Dallas, 2019