

Editorial on Innovation in Pediatric Nephrology

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When children develop kidney disease, it can play out in dramatically different ways. They can experience relatively mild disorders that respond to existing treatments and only impact their lives for the short term. Children also can develop chronic kidney disease that defies current treatments and can imperil or end their lives. Fewer than 50 percent of pharmaceuticals approved by federal authorities are explicitly approved for use in kids, and even fewer devices are labeled for pediatric use. Congress has offered incentives to manufacturers who study their treatments in children, but the laws do not require drug makers to demonstrate statistical significance or for the clinical trial to improve or extend children's lives.

Pediatric nephrologists diagnose, treat, and manage many disorders affecting the kidney and urinary tract, including kidney failure, high blood pressure, inherited kidney diseases, kidney stones, urinary tract infections, and abnormalities in the urine such as blood and protein. They also know how to evaluate and treat problems with growth and development that are specifically related to chronic kidney disease. They are also skilled in helping patients transition from pediatric nephrologists to nephrologists and urologists that care for adult patients. Pediatric nephrologists are the coordinators of a team that in-

cludes specialized nurses, dieticians, and social workers, all dedicated to the care of children with kidney. Another renal condition on the rise in children, also associated with poor dietary habits, is nephrolithiasis. The increasing prevalence of renal stones may be partially explained by improved diagnostic methods, but more importantly so by the change in dietary patterns of the last few decades. They work closely with other physicians such as pediatric urologists, pediatric surgeons, and pediatric radiologists.

Although a urinalysis is no longer recommended by the AAP as part of the well-child examination, many pediatricians continue to check the results of a urinary dipstick every year. As renal disease is often asymptomatic or may present with very subtle or non-specific signs and symptoms, the urine dipstick can be a valuable tool in the diagnosis of kidney disease, especially because it is inexpensive and easy to do in the pediatric office setting. Often, the urinary dipstick in an asymptomatic healthy child shows blood and/or protein, or blood/protein is found in the urine as part of the evaluation of a specific symptom such as abdominal pain. Some of these patients will require an extensive evaluation and referral to a pediatric nephrologist, whereas others can only be monitored without further investigations.