Acute kidney Injury in children in the Department of Nephrology of Tizi Ouzou University Hospital, etiologies and results

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Acute kidney Injury (AKI) is characterized by a reversible increase in the blood concentration of creatinine and nitrogenous waste products and by the inability of the kidney to regulate fluid and electrolyte homeostasis appropriately. There are many causes of AKI. Some causes of AKI, such as rapidly progressive glomerulonephritis (RPGN), may present as AKI but rapidly evolve into chronic kidney disease (CKD). Several renal diseases, such as the hemolytic–uremic syndrome (HUS), Henoch–Schönlein purpura, and obstructive uropathy with associated renal dysplasia, may present as AKI with improvement of renal function to normal or near-normal levels, but the child’s renal function may slowly deteriorate, leading to CKD several months to years later. Our study is retrospective. It was conducted in the Department of Nephrology of the University Hospital Center (UHC) of Tizi Ouzou, between 2015 and 2018. They were selected from the hospitalization register of our department.

We included all children with acute renal injury during this time period. Data was collected from patients’ medical records. Over the four years, 26 patients (34% male and 64% females) with a median age of 7 years (range 40 days to 15 years) were managed. The most affected age group in our study is [12-16] with a frequency of 36%. The circumstances of discovery in the majority of our patients being revealed by digestive signs (diarrhea, vomiting, ,,,,,,) and that related to the etiology of AKI (HUS post diarrhea).

In our study, 44% of the patients have thrombocytopenia associated with AKI; and this is due to the origin of this syndrome (Atypical HUS). The etiology of AKI is: Nephropathy glomerular in 37% hemolytic and uremic syndrom in 54% and obstructive nephropathy in 9% Patients survived in 92 % of the cases and 58% of them had a normal renal function. We had 7% of death. Peritoneal dialysis is the most commonly used emergency treatment for AKI in children at a frequency of 37%. Also, Hemodialysis is more used...