

15. CLINICAL PRESENTATION OF ACUTE KIDNEY INJURY IN PEDIATRIC; DR SALMA DIALYSIS CENTRE 2022

Tibyan Noorallah Mohammed¹.

BACKGROUND: Unlike in developed countries, where AKI typically develops in older patients with systemic diseases, multiple comorbidities, and multiorgan failure, AKI in developing countries primarily affects young individuals, particularly children and adolescents, and is often caused by a single factor. Although early detection and management can reduce complications, there is limited data available from Africa on this disease. AIM: This study aims to describe the sociodemographic characteristics and clinical profile of pediatric patients with AKI presenting to Salma Dialysis Center from 2017 to 2021. METHODS: A hospital-based descriptive crosssectional study was conducted at Salma Dialysis Center in Khartoum, Sudan. Patients' hospital records from January 2017 to December 2021 were reviewed to gather information on clinical presentation, investigations, treatment, and patient outcomes. RESULTS: Out of the 76 patients included in the study, 60.5% were males, with a median age of 8.0 years (range 0.09-17). Approximately 39.5% of the patients were from Khartoum state. The most common presenting symptoms were fever, generalized swelling, and changes in urine colour. The mean blood urea and creatinine levels were 1.6 mg/dl (range 0.2-23.8) and 82.0 mg/dl (range 9-416), respectively. The most common causes of AKI were malaria, sepsis, and sickle cell nephropathy. The majority of patients did not require dialysis and recovered without complications (84.2%). CONCLUSION: Malaria was found to be the most common cause of AKI in pediatric patients, with a higher prevalence among male patients. The prognosis for these patients was generally favourable.

Table. Shows the Demographic Characteristics of AKI Pediatric Patients who Attended to Salma Dialysis and Transplant Center 2017-2021.

Characteristics	Frequencies	Percentages
Age	Median 8.0 range(0.09-17) years	
Sex Male Female	46 30	60.5 39.5
Socio-economic status High Moderate Iow	2 5 69	2.6 6.6 90.8
Consanguinity between the parents Yes No	58 18	76.3 23.7
State of Residency Blue Nile East Darfur Jazeera Kassala Khartoum North Darfur North Kordofan South Darfur The river Nile West Darfur	3 1 14 1 30 2 6 7 1 3 2	3.9 1.3 18.4 1.3 39.5 2.6 7.9 9.2 1.3 3.9 2.6 7.9

Key words: Acute Kidney Injury; Malaria; Paediatrics; Renal Dialysis (Source: MeSH-NLM).

¹ Sixth-year Medical Student. University of Khartoum. Khartoum, Sudan.