

Supplement

Method

The present study was a retrospective study done at Hargeisa group hospital located in Hargeisa, the only tertiary care center with a dialysis facility in Maroodi-jeh region of Somaliland.

Patients who were admitted between August 2020 and August 2022 for acute kidney injury caused by pregnancy were included. The underlying cause of AKI, clinical presentations on admission, treatment options and the maternal and fetal outcomes were studied. Patients' ages, number of pregnancies, residency, the results of a detailed medical history, physical examination, routine urine analysis, levels of blood urea nitrogen and serum creatinine, and renal ultrasonography were noted and followed up on 6 weeks after discharge from hospital.

Patients with a history of kidney disease prior to pregnancy, pre-pregnancy hypertension, the existence of a renal stone, renal scarring, or a small-sized kidney on imaging modalities were excluded from the study.

SPSS software was utilized to analyze the data, and the results were reported as median standard deviation (SD), in numbers and percent.

The study adhered to the Declaration of Helsinki and a letter of permission was obtained from the Hargeisa Group Hospital administrative. Informed verbal consent was obtained from the participants after data collectors informed the study participants of the study's objectives, its methodology, and their right to decline participation. Furthermore, confidentiality of the study subjects was assured.

Definitions

Pregnancy related AKI was diagnosed when there was sudden-onset oliguria (<0.5 mL/kg/h for 6-12 h) or anuria (urine output < 200 mL in 24 hours) and azotemia (serum creatinine elevated to > 1.5 mg%) due to pregnancy related complications.

Pre-eclampsia was defined as new onset of gestational hypertension (Systolic Blood Pressure ≥ 140 and diastolic BP ≥ 90 mmHg) with significant proteinuria ≥ 300 mg/day after 20 weeks of gestation.

Hemolysis, elevated liver enzymes, and a low count of platelets in a pregnant woman or a puerperium patient within the first week of delivery were all considered to be hallmarks of HELLP syndrome.

In this study, we defined puerperal sepsis as an infection of the genital tract occurring during labor or within 6 weeks of postpartum period, as defined by The World Health Organization (WHO).^{S1}

PRAKI Maternal outcome

If the patient had normal kidney function upon discharge, the maternal outcome was recorded as fully recovered.

Patients who improved clinically, became dialysis independent but had abnormal kidney function levels at discharge were classified as having made a partial recovery.

Patients who were undergoing dialysis at the time of discharge were regarded as dialysis dependent.

A lost to follow-up was recorded when a diagnosis was made, regardless of whether the patient received conservative treatment, started HD or left against medical advice.

Neonatal outcome

Distribution outcomes regarding neonates were reported as either alive or dead. Neonatal mortality at admission or prior to hospital discharge or fetal death after 20 weeks of pregnancy were noted.

Limitations

Data were gathered from a single location, which raised doubts about their generalizability to the rest of the country. The study center, however, is the largest public institution to provide sufficient data for the period of time examined by the current study. The fact that this study describes the prevalence, etiology, and outcomes of PRAKI patients in Somaliland for the first time is one of its key strengths. The study would promote health education and enhance public knowledge about the causes of AKI particularly encouraging pregnant mothers to seek early antenatal care with the nearest health providers.

The study will improve practice through allowing healthcare professionals to take extra precautions and intervene appropriately to address risk factors for pregnancy-related acute renal injury in an efficient and effective manner.

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Tables

Supplemental Table 1: Clinical presentations of patients with PRAKI

Clinical presentations	Frequency	Percent
Hypertension	10	32.2%
Oliguria	17	54.8%
Fever	8	25.8%
Oedema	9	29.0%
Abdominal pain	4	12.9%
Anuria	6	19.3%
PPH	13	41.39%
Breathlessness	3	9.6%
Encephalopathy	2	6.4%
Haemorrhage shock	1	3.2%
Seizure	2	6.4%
Antepartum haemorrhage	1	3.2%
Jaundice	1	3.2%

Supplemental Table 2: Outcome of patients with PRAKI

Outcome	Frequency	Percent
Fully recovered	15	48.39%
Dialysis dependent	2	6.45%
Partially recovered	6	19.35%
Lost on follow up	5	16.13%
Maternal mortality	3	9.68%
Total	31	100.0%
Fetal mortality	18	58.6%