

COMPREHENSIVE PEDIATRIC AKI STUDY QUESTIONNAIRE

SECTION 1: PATIENT IDENTIFICATION AND DEMOGRAPHIC INFORMATION

Hospital Enrolled

- Kibagabaga District Hospital
- Muhima District Hospital
- Kacyiru District Hospital
- Byumba District Hospital
- Ruhengeri Level II Teaching Hospital
- Kibuye Referral Hospital

Date of Enrollmentyyyy-mm-dd

Data collector Name

- IRENE
- JEANNETTE
- JOY
- VAINQUEUR
- Other

STUDY ID**Date of birth**yyyy-mm-dd

Gender

- Male
- Female

Weight at admission

Height /length in cm

District of residence

Sector of Residence

Social economic categories

- UBDEHE CAT 1
- UBDEHE CAT 2
- UBDEHE CAT 3
- UBDEHE CAT 4
- NOT MENTIONED

Insurance status

- Mutuelle de Santé
- RAMA
- MMI
- Private insurance
- No insurance
- Other:

Date of admission

yyyy-mm-dd

Date of AKI Diagnosis

Time of Admission (24 hour format)

Mode of arrival

- Self-referral
- Health center referral
- District hospital referral
- Other hospital referral
- Emergency transfer
- Counter referral
- Others

Primary complaint:

- Fever
- Vomiting
- Diarrhea
- Reduced urine outputs
- Generalised body swelling / edema
- abdominal swelling
- facial swelling
- lower limb swelling
- Difficulty Breathing
- Altered Consciousness/ mental status
- Seizures
- cough
- chest pain
- hemoptysis
- abdominla pain
- muscle weakness
- generalized body weakness
- headache
- dark urine
- vomiting blood
- epistaxis
- Others

Associated conditions

- pneumonia
- malaria
- acute gastroenteritis
- sepsis
- meningitis
- meningoencephalitis
- multiorgan dysfunction
- trauma
- traditional medication use
- shock (septic, cardiogenic)
- shock Hypovolemic
- nephrotic/ nephritic syndrome
- acute glomerulonephritis
- Pharyngitis
- Others

Comorbidities

- Diabetes mellitus
- congenital renal anomalies
- hypertension
- malignancies
- sickle cell disease
- heart failure
- severe malnutrition
- liver failure
- congenital heart disease
- hemophilia
- Others

Duration of Symptoms Before Seeking Care

• Duration of symptoms before first healthcare contact: _ days

Vitals sign on admission

Temperature

Heart rate (beats/min)

Respiratory rate: _ breaths/min

Blood pressure: / mmHg

• Oxygen saturation: _% on Room air Oxygen support

Hydration status

- Well hydrated
- Some dehydration
- Severe dehydration
- not mentioned

signs of dehydration

- Dry mucous membranes
- Sunken eyes
- Reduced skin turgor
- Delayed capillary refill (>2 seconds)
- Cool extremities
- None of the above

Urine output Assessment

- Normal (>1 ml/kg/hour)
- Reduced (0.5-1 ml/kg/hour)
- Oliguria (<0.5 ml/kg/hour)
- Anuria (<0.3 ml/kg/hour or no urine for >12 hours)
- Not mentioned

Method of urine measurement

- Urinary catheter
- Urine collection bag
- Diaper weighing
- Estimated by caregiver
- Not measured

Clinical Signs and Symptoms

Neurological status

- Alert
- Responds to voice
- Responds to pain
- Unresponsive
- Not assessed/ mentioned

• Glasgow Coma Scale: E V M Total:**Previous hospital admissions**

- Yes
- No

Unknown If yes, reason and date: _

•Previous episodes of AKI

- Yes
- No

Unknown If yes, reason and date: _

AKI Risk Factors mentioned

- Recent infection
- Recent surgery
- Recent trauma
- Exposure to nephrotoxic agents in the past 14 days: NSAIDs, Aminoglycosides, Contrast media, Traditional medicines
- None of above

Unknown If yes, reason describe and date: _

Previous baseline creatinine available

- Yes
- No

If yes, value: _ mg/dl or _ μ mol/L, Date: //

Admission laboratory values

Amount

Unit of measurement

Was it measured

Serum Creatine

- Yes
- Not mentioned

Blood glycemia

Yes Not mentioned

Bicarbonate

Yes Not mentioned

Chloride

Yes Not mentioned

ALT

Yes Not mentioned

Phosphorus

Yes Not mentioned

Blood urea nitrogen (BUN)

Yes Not mentioned

Serum albumin

Yes Not mentioned

AST

Yes Not mentioned

Sodium

Yes Not mentioned

C-reactive protein

Yes Not mentioned

Potassium

Yes Not mentioned

Hemoglobin

Yes Not mentioned

Calcium

Yes Not mentioned

LDH

Yes Not mentioned

White Blood Cell count

Yes Not mentioned

Platelet count

Yes Not mentioned

Malaria test

- Positive
- Negative
- Not done

Blood culture

- Positive
- Negative
- Not done

If positive, organism: _____

Urine dipstick performed

- Yes
- no

VALUES**Value obtained****Blood**

- Negative
- 3+
- Trace
- 2+
- 1+
- 4+

Glycose

- Negative
- 3+
- Trace
- 2+
- 1+
- 4+

Nitrites

- Negative
- 3+
- Trace
- 2+
- 1+
- 4+

Leukocytes

Negative 3+ Trace 2+ 1+ 4+

Protein

Negative 3+ Trace 2+ 1+ 4+

Urine microscopy

Yes
 No

If yes, findings: _

Ultrasound performed

yes
 no
 not mentioned

findings

other imaging

Chest X ray
 CT Scan
 Other imaging
 none

if other specify

• AKI diagnosed based on

Increase in serum creatinine by ≥ 0.3 mg/dl within 48 hours Increase in serum creatinine to ≥ 1.5 times baseline within 7 days
 Urine output <0.5 ml/kg/hour for 6 hours
 Multiple criteria
 Not mentioned

AKI Staging at Diagnosis (KDIGO)

Stage 1: SCr 1.5-1.9 times baseline OR ≥ 0.3 mg/dl increase OR urine output < 0.5 ml/kg/h for 6-12h

Stage 2: SCr 2.0-2.9 times baseline OR urine output < 0.5 ml/kg/h for ≥ 12 h

Stage 3: SCr 3.0 times baseline OR increase to ≥ 4.0 mg/dl OR initiation of RRT OR urine output < 0.3 ml/kg/h for ≥ 24 h OR anuria for ≥ 12 h

no staging done

Time of AKI Diagnosis

• AKI present on admission

• AKI developed during hospitalization

• not specified

If yes, days after admission: _____

Probable Etiology of AKI

Pre-renal (hypovolemia, shock, heart failure)

Intrinsic renal: Acute tubular necrosis Glomerulonephritis Hemolytic uremic syndrome Interstitial nephritis

Post-renal (obstruction) Multifactorial Unknown

NOT MENTIONED

Initial management

Fluid resuscitation

Diuretics used

Antibiotics initiated

Needed mechanical ventilation

Vasopressors/inotropes

None of above mentioned

if above provide details (Type: Normal saline Ringer's lactate Other: _____ o Volume in first 24 hours: _____ml/kg • Diuretics used: Yes No If yes: o Type: Furosemide Other: _____ o Initial dose: _____ mg/kg o Route: IV Oral**Which medication used**

AKI-Specific Management

- Nephrotoxic medication discontinued
- Dose adjustments for medications
- Nutritional support
- Not mentioned

Renal Replacement Therapy (RRT) indicated

- Yes
- No
- Not mentioned

If yes

- RRT received
- If not received despite indication, reason

If RRT Received state o Type: Peritoneal dialysis Hemodialysis CRRT o Date initiated: //_ o Duration: _ days**IF not received state the reason****Discharge Details****• Date of discharge/death**

yyyy-mm-dd

Discharge status

- Alive
- Deceased
- Referred to another hospital

If deceased (primary cause of death and contributing factor)

Was AKI a direct or contributing cause

Yes
 NO
 Unknown

Final diagnosis (related to AKI)**Final serum creatinine****Renal recovery status**

Complete recovery (SCr \leq baseline)
 Partial recovery (SCr $<$ diagnosis level but $>$ baseline)
 No recovery (SCr \geq diagnosis level or still requiring RRT)

Discharge medications**Nephrology follow up arranged**

Yes
 No