# ECHOSESSION

APPROACH TO DIARRHEA ILLNESSES IN ADULTS

DR ATUMANYA ZELDAH

MO, KAYUNGA RRH.

# *CASE PRESENTATION*

MS , 17 yr./ old male , brought in from home semiconscious,  presented to the emergency department with a 2 day history of Diarrhea,Vomiting,General body weakness, 1 day history of cough and Reduced level of conscious ness x 6 hours (history was collateral )

# EMERGENCY ASSESMENT AND MANAGEMENT

| **Air way** | **Patient had no abnormal sound , no secretions ,** | **Air way patent** |
|---|---|---|
| Breathing | -Mild distress-<br>-RR20, SPO2 89-90% at R/A<br>-Chest was clear, with equal air entry | -Oxygen therapy – 3l / min , by nasal prongs , spo2, 95 % on o2 therapy |
| Circulation | BP-90/55<br>PR- 110 b/m, rapid, thready, normal rhythm ,S1S2 heard only but tachycardic, cold extremities, capillary refill>3seconds ,very slow skin pinch, | -Inserted 2 large cannulas<br>-Resuscitated the patient iv fluids r/l (4.5 liters in the 1st 3 hrs i.e. 30 ml/kg in the 1ts 30 min , then 70 mls /kg in the next 2 and a half hrs ) estimated weigh 45kg , and re-assessed the patient for response.<br>- warming up fluids . |

| | | |
|---|---|---|
| **Disability** | **-Patient semi conscious – GCS 11/ 15 – (m-5, e-3, v3)**<br>**-RBS -4.1mmol/I**<br>**-Pupils were normal size, equally reactive to light**<br>**-Neck soft , kerning , and Brudzinski signs negative** | **-Recovery position**<br>**-Pass ng tube and catheter**<br>**- D50%- 30mls start** |
| Exposure | -Patient cold- un able to take the temperature at the time of assessment .<br>-No life threatening injuries, discovered on examination | -Gave warm fluids<br>-Patient covered |

# continuation

| | | |
|---|---|---|
| **S** | **Signs and symptoms** | **- attendants reported patient had had ,Several episodes of profuse, watery diarrhea > 15 episodes a day, non bloody and no associated abdominal pain and had about 8 episodes of vomiting feeds at every attempt to feed X 2 days<br>-A cough was non-productive x 1 day- no detailed information since history was collateral<br>-Reduced level of consciousness 6 hours , which prompted them to rush to hospital. Neither fevers nor a convulsions were reported.** |
| A | allergies | No known history of food or drug allergy |
| M | Medications | Oral rehydration salts , tabs metoclopramide- for the last 24 hrs (as self medication) . No history of any other chronic medication. |

| P | Past medical history<br><br>past surgical history<br><br>FSH | Index admission , no history of chronic illnesses ,un known sero status .<br>un remarkable surgical history<br><br>Not married , did not smoke or drink alcohol , 1st born of 4 |
|---|---|---|
| L | Last meal | 7 hours back -Had been vomiting every feed |
| E | Events | Patient was found , in his bed with reduced level of consciousness 6 hrs prior to admission, no history of any trauma was mentioned |

PROBLEM LIST

- Severe dehydration
- Hypotension
- Reduced level of consciousness
- Feeding difficulty

# INVESTIGATIONS

- Rbs – 4.1mm/l
- CBC- normal parameters
- MDRT-negative
- CHOLERA RDT- positive
- SERUM ELECRTOLYES– k 3.0 low, NA 144, CL 115.7 high ,
- RFTS -Creatinine -146, Urea 9.1.
- LFTS- normal
- RCT – negative

# Sample results

KRRH1/AD/02/FORM VERSION 3
KAYUNGA REGIONAL REFERRAL HOSPITAL
CLINICAL CHEMISTRY LABORATORY REPORT

| | | | |
|---|---|---|---|
| ID | 414 | DATE | 28/07/23 15:37:41 |
| S.NO. | N001461 025 | OPERATOR ID | TEEKA |
| S.TYPE | Ser/Pl | | |
| AGE | 17 Y | PATIENT ID | |
| SEX | M | CLINICIAN/Dr | |
| DRAW DATE | 27/07/23 | LOCATION | KRRH ISOLATION |
| DRAW TIME | 17:13 | Dr. Tel: | |

| TEST | RESULT | UNIT | EXPECTED VALUE |
|---|---|---|---|
| ALB2 | 42.3 | g/L | ( 38.0- 52.0) |
| TP2 | 75.6 | g/L | ( 66- 89) |
| ALTL | 19.5 | U/L | ( 0- 45) |
| ASTL | 23.0 | U/L | ( 0- 40) |
| ALP2L | 228 | U/L | ( 65- 275) |
| GGTI2 | 61 H | U/L | ( 0- 55) |
| BILD2 | 2.2 | umol/L | ( 0- 5.13) |
| BILT3 | 7.2 | umol/L | ( 0- 23.94) |
| CREJ2 | 146 H | umol/L | ( 44.2- 114.92) |
| UREAL | 9.1 H | mmol/L | ( 0.33- 1.11) |
| Na | 144 | mmol/L | ( 138- 150) |
| K | 3.07 L | mmol/L | ( 3.6- 5.4) |
| Cl | 115.7 H | mmol/L | ( 90- 108) |

Comments: _____

Report Date: 28/7/2023 Report Time: 16:08

Analyzed by: Sign/ Date 28/7/2023

Reviewed/Authorized by: Sign/Date 28/7/23

The Republic of Uganda
**MINISTRY OF HEALTH**
NATIONAL HEALTH LABORATORY AND DIAGNOSTIC SERVICES
NATIONAL MICROBIOLOGY REFERENCE LABORATORY/ GENOMICS REF LA

KAYUNGA CHOLERA OUTBREAK CONFIRMATORY RESULTS

| Patient ID | Patient name | Age | Sex | Sample type | PCR results |
|---|---|---|---|---|---|
| 23/1305 A/B | | 70 | F | Stool/ Swab | Positive |
| 23/1306 A/B | | 37 | M | Stool/ Swab | Positive |
| 23/1307 | | 2 | M | Stool | Positive |
| 23/1308 | | 17 | F | Stool | Negative |
| 23/1309 | | 15 | M | Stool | Positive |
| 23/1310 | | 11 | M | Stool | Positive |
| No ID | | 12 | F | Stool | Negative |
| | | | | | |

Tested by: Francis Ongole Signature: Date: 26/07/2023

Reviewed by: Atuhaire Winifred Signature: Date: 26/07/2023.

CENTRAL PUBLIC HEALTH LABORATORIES
MINISTRY OF HEALTH
26 JUL 2023
Micro Biology & UTV Satellite Lab

# DIAGNOSIS

- Cholera  compilated with severe dehydration
- Hypotension
- Electrolyte imbalance
- URTI

# Treatment and follow up

**Definitive management**

- Iv ciprofloxacin 400mg bd x 5 days

**Supportive management**

- Continue  oxygen theurapy3l/min by nasal prongs
- Iv metoclopramide 10mg tds x  2 day
- Iv d50 30mls start then continue saline dextrose infusions(ringers with dextrose 50 % )  8 hrly x 24 hrs – (during  the maintenance fluid administration)
- Maintenance fluids after resuscitation – R/L 500mls 4 hrly x 24 hrs
- ORS to be initiated as soon as patient can tolerate feeds , at least 3 l per day , to take as much as he can after every loose motions
- Pass catheter for urine out put monitoring
- Educating the attendants and counselling them about the disease  prevention

# IPC

- Isolated the patient .
- Educated the  attendants, about the health concerns pertaining  the disease
- Administration was informed since cholera is a public health concern , such that they could notify the district health team.

# FOLLOW UP

-Duration of stay – 25th July- 31st July/2024

**On the very day**

After resustation, patient gained consciousness, and the NG tube was removed, he spent a fair night though he still had episodes of profuse diarrhea .

**Day 2**

-patient was still weak , still several episode of diarrhea and vomiting his vitals were stable

BP 121/70 , PR – 100bpm , SPO2 99 % on oxygen 3l/min , TEMP 36.1 , RBS 6.3mm/l, patient was fully conscious and not distressed and we maintained previous treatment, but intermittent o2 therapy .

**Day 3**

- patient had improved and was weaned off oxygen , vomiting had reduced to 2 episodes , reduced episodes of semi solid stool, we begun ORS for the patient .catheter was removed .

**Day 4**

- patient still had a few episodes semi solid stools , mild vomiting and still weak, but he could tolerate oral feeds. Fluid management was also continued to support hydration, frequency adjusted .

# CONTINUATION

**Day 5**

patient was much better vomiting had stopped , stool had solidified , and no major complaints were reported . We kept patient around , with drew in fluids , encouraged patient to feed orally and take ORS at least 3litres per day .kept him around for monitoring .

**Day 6**

patent was stable and switched on to oral antibiotics .

**Day 7**

patient was discharged in a better condition, on oral medication, and health education was done , preventive measures- (boiling drinking water and food properly ,hygiene , waste disposal , isolation of cases ) and feeding.

Following d/c more cases were reported , from the same proximity , and a committee was formed to investigate the issue , also to emphasize preventive measures (IPC) to the hospital and the community at large , measures to control it were put in place, and the issue was notified to the district.

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# THANK YOU