

# SEVERE MALARIA IN ADULTS

DR AMENY RONALD

INTERN

BWERA GENERAL HOSPITAL

# CASE PRESENTATION

- BI, 18 y/o F brought from home with a history of 2 episodes of Convulsions and high grade fevers for 3 days and was unconscious at the time of admission.

# EMERGENCY ASSESSMENT AND MANAGEMENT

Airway and C-Spine	Unable to support neck Noisy breathing	Guedel's airway
Breathing	RR-34bpm, saturation 87% ON R/A Basal crackles on both lungs	<ul style="list-style-type: none"> <li>Oxygen by prongs 94% but unstable 98% by mask</li> <li>Cardiac bed</li> </ul>
Circulation	Tachycardia with PR of 144,thready , bounding. Capillary refill>2s with cold extremities. BP-86/53 mmHg Severe Pallor, HS 1,2 S3 Gallop	<ul style="list-style-type: none"> <li>Inserted 2 large bore cannulas 18G</li> <li>NS 1L:D5 0.5L</li> <li>Blood grouping and crossmatch A +ve ,transfused PRCs .</li> </ul>
Disability	GCS-E-2,V-2,M-4 Total 8/15 PEARL , Normal deep tendon reflexes, neck stiff, Absent Kernings and Brudzinsky RBS-1.7mmol/L	Lateral recumbent position D50 30mls
Exposure	No trauma Patient cold,muddy Temperature(axilla)-35.5	Wet clothes removed and patient covered.

# Cont,

S	Signs and Symptoms	<ul style="list-style-type: none"><li>• 2 episodes of GTC convulsions associated with urine and stool incontinence and followed by reduced level of consciousness on a cold rainy night.</li><li>• Had complained of GBW , dizziness, poor appetite earlier in the day and symptoms escalated in the evening at 7pm and was brought to the hospital at 10pm .</li><li>• 4 days prior to admission, had had a history of headaches for 3 days that was associated with high grade fevers and non-projectile vomiting</li><li>• Mrdt was positive at a clinic following these symptoms and was put on coartem which she defaulted after two days following slight improvement</li></ul>
A	Allergies	No known food or drug allergies
M	Medications	Coartem , Paracetamol
P	Past Medical History	Previously managed for severe Malaria 1 year ago
L	Last Meal	11 hours ago , tea with Cassava
E	Events	First convulsion occurred outside in the rain , patient had fallen on the muddy soil in the compound.

# Problem list

- Convulsions
- Hypo/hyperthermia
- Feeding difficulty
- Tea colored urine
- Circulatory collapse
- Malaria related Acute respiratory distress syndrome

WBC	2.07	10 <sup>9</sup> /l	L	5.00	11.60
LYM%	46.1	%		19.1	48.5
MID%	28.1	%	H	4.5	12.1
GRA%	25.8	%	L	43.6	73.4
LYM	0.95	10 <sup>9</sup> /l	L	1.30	4.00
MID	0.58	10 <sup>9</sup> /l		0.30	1.00
GRA	0.53	10 <sup>9</sup> /l	L	2.40	7.60

HGB	4.0	g/dl	L	13.2	17.3
MCH	28.2	pg		27.5	32.4
MCHC	34.6	g/dl	H	31.7	34.2

RBC	1.44	10 <sup>12</sup> /l	L	4.33	5.78
MCV	81.5	fL	L	84.0	98.0
RDWs	31.8	fL	L	36.2	49.7
RDWc	13.8	%		11.1	14.0
HCT	11.70	%	L	39.90	53.90

PLT	40	10 <sup>9</sup> /l	L	156	342
PCT	0.02	%	L	0.16	0.36
PDWs	7.1	fL	L	11.1	19.7
PDWc	35.6	%		37.8	43.6
MPV	6.1	fL		8.3	12.1
P-LCC*	5	10 <sup>9</sup> /l	L	55	139
P-LCR*	12.55	%	L	25.30	53.80

\* research parameter only

WBC

REPORT

Blood group — B Rh D +ve.  
Blood test done

Dr

Age:

# Investigations

- RBS-1.7mmol/L
- Mrdt-Positive
- Blood Smear ++
- Hb-4.9 by Hemocue
- CBC-Hb-4.0(13.2-17.3)  
-Plt-40(156-342)

Blood group-B +ve

LP-Not done

Urine dipstick-Hemolyzed 10 trace.

LFTs , RFTs and Serum electrolytes-Not done , no reagents.

# Diagnosis

Severe Malaria with

- Cerebral involvement
- Hypoglycemia
- Severe Anemia
- Acute Kidney Injury
- Hypovolemic shock



# Treatment and follow-up

## Definitive management

- IV Artesunate 132mg at 0,12,24 hours(two doses),then 132mg OD for 2 days till patient was able to eat ,Then switched to Dihydroartemisinin -Piperaquine(P-Alaxin) 3 tabs OD for 3 days.

## Supportive management.

- IV diazepam 10mg twice in 1 hour , still convulsed thus phenytoin 825mg given as loading dose.
- IV Paracetamol 1g 8 hourly for 3 days.
- Oxygen by Nasal prongs then switched to guedels airway and oxygen mask to achieve maximum saturation.
- IV D50 30 mls , then Feeding by NGT , oral hygiene
- Packed RBCS 550mls,IV Furosemide 55mg bd.
- Catheter to monitor urine output and color.
- IV NS:D5 1.5L in 12 hours , then 1L over the next 12 hours.

# Followup

- 16<sup>th</sup>-22<sup>nd</sup>-Feb-Duration of stay in the hospital.
- Came unconscious on 16<sup>th</sup> evening, GCS had improved markedly by 19<sup>th</sup> morning and urine was clearing , started eating fairly on 20<sup>th</sup>
- Oral Medications started on 21<sup>st</sup> when patient was able to walk and Blood smear for Malaria parasites were negative.
- Patient discharged on 22<sup>nd</sup> with a mosquito net after deworming with tabs albendazole 400mg and nutritional education given.