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GLOBAL HEALTH



ECHO SESSION CASE PRESENTATION

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Case Presentation

Case –NJ 65y/F, known DM/HTN/CKD patient for the past 2 yrs. was re-admitted 1 week after discharge, Presented with a h/o: GBW for 3/7, easy fatigability for 2/7, facial puffiness, lower limb swelling, and associated worsening difficulty in breathing, lost of consciousness shortly before admission, developed convulsions and twitching



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Primary Survey (Emergency Assessment and Management)

A	Airway	<ul style="list-style-type: none"> Airway patent but potentially compromised due to reduced level of consciousness 	<ul style="list-style-type: none"> Maintained patent airway NG tube was passed
B	Breathing	<ul style="list-style-type: none"> Severe respiratory distress RR= 30b/min, Equal air entry with bilateral crackles 	<ul style="list-style-type: none"> SPO2 maintained at 98% with 10L/min oxygen via NRM
C	Circulation	<ul style="list-style-type: none"> PR=71 bpm BP=136/72mmHg, Repeat BP= 186/94, PR = 69 bpm 	<ul style="list-style-type: none"> 1 large bore cannula inserted Blood samples for investigations: CBC, RFTs LFTs, serum electrolytes, HBA1c & Lipid profile IV Lasix 80mg start

Primary Survey (Emergency Assessment and Management)

D	Disability	<ul style="list-style-type: none">• Semi-conscious, GCS 11/15 (M=5, E=2, V=2)• Pupils normal, equal & reactive• Neck soft , kerning negative• RBS = 5.2mmol/L	<ul style="list-style-type: none">• Passed urinary catheter,• IV calcium gluconate 10mls of 10% over 10mins• 10IU of actrapid in every 50mls of D50 was started,• P.O Kayexelate 2 spoon full BD x 3/7
E	Exposure	<ul style="list-style-type: none">• Axillary temperature was 36.2°C• No life threatening injuries	<ul style="list-style-type: none">• Covered the patient• Continued IV meds

Secondary Survey (Head-to-toe examination)

G/E – appeared significantly ill, distressed, semiconscious, had some DeH₂O, mild pallor, no jaundice, no cyanosis, had bilateral pitting edema and no lymphadenopathy

CVS – Active precordium, S1, S2 + a murmur auscultated

R/S – normal chest shape, no tracheal deviation, dull percussion note, equal air entry however with coarse crackles bilaterally



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Secondary Survey (Head-to-toe examination)

P/A – abdomen moderately distended, moving with respiration, non-tender, no palpable organs

ENT –good oral hygiene, no nose or ear discharge or pain

CNS –semiconscious, GCS=9/15, PEARL, normal tone but reduced reflexes

MSK – Wasted muscle bulk, Swollen ankles and knee joints



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SAMPLE History

S	Sign & Symptom	<ul style="list-style-type: none"> Reportedly had GBW, lower limb swelling, chest pain, difficulty in breathing, LOC before admission and convulsions after Abnormal forced breathing, semi-conscious, slurred speech with facial puffiness 	
A	Allergies	<ul style="list-style-type: none"> No known drug or food allergies 	
M	Medication	<ul style="list-style-type: none"> DM drugs: glimepride/dapagliflozin, HTN drugs: Telmisartan-H, bisoprolol, furosemide, others: Rosuvastatin, Clopidogrel, Pregabalin, Vit B12, 	

SAMPLE History

P	<ul style="list-style-type: none"> • Past Medical History • Past Surgical History • FSH 	<ul style="list-style-type: none"> • Re-admission: admitted 1 week prior with pneumonia • No h/o any operations, blood transfusion, and trauma • Married to with six children, no smoking & alcohol 	
L	Last meal/LNMP	<ul style="list-style-type: none"> • Last meal: 5-9 hrs, LNMP-Post-menopause 	
E	Events	<ul style="list-style-type: none"> • Patient was found semi-conscious in her home prior to admission, following complaints of GBW, easy fatigability and chest pain 	

Problem List

1. Reduced consciousness
2. Respiratory distress
3. Electrolyte Imbalance
4. Convulsions
5. Aspiration Pneumonia
6. Hypertensive emergency
7. Generalized body swelling

CREJ2	758 H	umol/L	(	44-	106)
UREA	24.7 H	mmol/L	(	2.7-	6.4)
Na	135	mmol/L	(	135-	150)
K	6.94 H	mmol/L	(	3.5-	5.5)
Cl	101.0	mmol/L	(	95-	110)
CHOL	3.76	mmol/L	(	3.7-	5.7)
LDLC3	1.7	mmol/L	(	0.0-	3.37)
HDLC4	1.9 H	mmol/L	(	0.9-	1.4)

Eos%	L	0.3 %	0.5 - 5.0
Bas%		0.2 %	0.0 - 1.0
IMG%		0.5 %	0.0 - 100.0
RBC	L	2.88 $10^{12}/L$	3.50 - 5.00
HGB	L	7.9 g/dL	11.0 - 15.0
HCT	L	24.6 %	37.0 - 47.0
MCV		85.3 fL	80.0 - 100.0
MCH		27.4 pg	27.0 - 34.0
MCHC		32.1 g/dL	32.0 - 36.0

Investigations

- RBS: At 13:00hrs= 5.2mmol/L, 21:00hrs=3.2 mmol/L
- CBC- HB = 7.9g/dl, MCV & MCH normal, WBCs=7.87x10, PLT=357x10 slightly high, other parameters normal
- Serum Electrolytes, K=6.94 mmol/l High, HCO₃= 14.2mmol/l, Na=135mmol/l, CL=101.0 Normal
- RFTS –Creatinine= 758umol/l high x 7, BUN= 24.7mmo/l high x 4
- LFTS- ALT=186.8 high x 4, AST= 209.5 high x 5, GGT=353.0 high x 6, ALP= 214.0 high x 2 ALB= 40g/dl normal
- Echo: Hypertensive cardiomyopathy with left ventricular dysfunction
- **CXR, ABG, ECG NOT DONE**

Diagnosis

DM/HTN/ESRD

Complicated by

- Hyperkalemia
- Mild Anemia
- Uremic syndrome

Aspiration pneumonia

DDX

- CVA
- CCF

Management

4/09/2024

Supportive

- Oxygen 10L/min, by NRM
- NG tube For feeding
- Catheterized
- Nebulized salbutamol 5mg/3mls
Ns 3 divided doses over 2hrs

Definitive

- IV Lasix 80 mg start
- IV calcium gluconate 10mls of 10% over 10mins
- 10IU of actrapid in 50mls of D50 was started,
- P.O Kayexelate 2 spoon full BD x 3/7
- IV phenytoin 100mg start



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5/09/2024

- Continued salbutamol 5mg/3mls Ns 3 divided doses over 2hrs
- P.O Kayexelate 2 spoon full BD x 3/7
- IV Co-amoxiclav 600mg BD x 5/7
- IV Metro 500mg tds for 5days
- Lasix continued at 60mg bd
- Monitored vitals



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6/09/2024

- GCS decrease to 8/15, BP: 229/106mmhg PR: 84bpm, RBS: not done
- IV labetalol 20mg over 20min
- Lasix continued
- IV antibiotics continued
- Brain CT ordered
- Monitored vital signs (RBS,BP, SPO2, Temp, RR, PR)
- Repeat RFTs and Electrolytes ordered



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Disposition Plan

- Do a CT scan,
- Consult Neuro team
- Nephrology for Dialysis & further assessment.
- Arranged transfer to ICU for specialized care & monitoring

Patient Outcome:

- Tragically, the patient passed away on 6th September 2024 at 11:00 am before transfer to the ICU.

Thank you