Seed GLOBAL HEALTH

Project ECHO

ECHO SESSION CASE PRESENTATION

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Case Presentation

PC – right sided weakness x 1/7

neck swelling x 8/12

HPC

31/F, referred from Kawolo hospital, hypertensive for 4/12 on amlodipine/losartan-H (poorly controlled). She has been unwell for 8/12 with a painless neck swelling, progressively increasing in size but with no obstructive symptoms associated with palpitations, tremors, anxiety episodes, marked weight loss and insomnia. No reported dyspnea. 1/7 prior to admission (21hrs from symptom onset), she developed sudden right sided weakness associated with headache, 1x GTC lasting 2mins and reduced LOC.

Primary Survey (Emergency Assessment and Management)

A	Airway	Patent, threatened by reduced LOC	Maintain airway patent, patient positioning
B	Breathing	Not in distress Clear chest RR 18 SaO2 95% RA	Monitor
C	Circulation	Full volume pulse, tachycardic, Irreg. irregular pulse Warm peripheries, CRT 2sec **HR 145** **Bp 186/105**	Urgent 12 lead ECG IV access Pick off samples for investigations

Primary Survey (Emergency Assessment and Management)

D	**Disability**	**Semi-conscious GCS 11/15 (E3M5V3)** **Neck soft, PEARL** **Right hemiparesis, Right CN VII palsy** **RBS 12.4 mmol/l** **No seizures during assessment period**	**Recovery position** **Pass urethral catheter** **Urgent Brain CT scan (non-contrasted)**
E	Exposure	Axillary temperature was 38.2˚C No life threatening injuries	Uncover patient IV Paracetamol 1g given

Secondary Survey (Head-to-toe examination)

- G/E – semi-conscious GCS 11/15, febrile, moderate dehydration, diaphoretic, restless, fine tremors, not pale, not jaundiced, no edema. Anterior neck swelling noted, symmetrical, moves with respiration, non tender, measures 3x3x2cm, noted exophthalmos.
- CVS – Irreg. irregular pulse, HR 145, apex 5th ICS, apical heave, no murmurs
- R/S – No respiratory distress, clear chest

Secondary Survey (Head-to-toe examination)

- P/A – Scaphoid abdomen, moving with respiration, non-tender, no palpable organs
- ENT – good oral hygiene, no nose or ear discharge or pain
- CNS –semiconscious, GCS=11/15, PEARL, no meningism, right CN VII palsy, right sided hemiparesis, noted fine tremors.
- MSK – wasted with reduced muscle bulk

SAMPLE History

S	Sign & Symptom	Progressive symptoms over the past 8 months Appreciable weight loss, polyuria, polydipsia and polyphagia Acute onset of LOC, seizures, Right sided weakness Anterior neck swelling, exophthalmos, tremors, irreg. irreg. pulse, right hemiparesis, dehydrated, wasted.	
A	Allergies	No known drug or food allergies	
M	Medication	Amlodipine 10mg x 4/12 Losartan-H 50/12.5mg x 2/12	

SAMPLE History

P	**Past Medical History** **Past Surgical History** **Past Gyn. History** **FSH**	**Hypertensive (poorly controlled) on treatment for the past 4/12, Index admission** **No history of surgery, blood transfusions or trauma** **P1+2, amenorrhea for past 1 year, Irregular periods for past 3 years** **Not married, has one child (son) who is 8years old, both parents still alive, no familial illnesses, No alcohol/smoking Hx**	
L	Last meal	Last meal was 28hrs prior to admission	
E	Events	Patient was observed to have acutely lost consciousness, fell to the ground on a sitting position and get a GTC seizure for about 2 minutes	

Problem List

- Reduced LOC
- Hypertensive emergency
- Irreg. irregular pulse with tachycardia (atrial fibrillation)
- Left. CVA
- Thyrotoxicosis ?Graves disease ?toxic multinodular goitre
- Hyperglycemia ?DM
- Dehydration

Investigations

TEST	RESULT	NORMAL RANGE
Non-contrasted brain CT scan	Multiple brain infarcts, largest in left MCA territory	-
ECG	Atrial fibrillation with rapid ventricular response, HR 152	-
Thyroid Function tests TSH T3 T4	0.005 37.59 98.40	0.27 – 4.20 IU/ml 3.10-6.80 pmol/l 12.0-22.0 pmol/l
HbA1C	14.0%	<5.7%

TEST	RESULT
RCT	Negative
CBC, RFTs, LFTs Electrolytes	All essentially normal Na 136 K 4.5 Cl 104
ECHOCARDIOGRAPHY	Concentric LVH, Grade 1 diastolic dysfunction, EF 67% consistent with HHD
NECK USS	Diffuse goitre with increased vascularization
Anti-thyroid antibodies	*pending

Management

Definite management

- IV Fluids 1L N/S stat then mantainance 500mls 6hrly
- Continous vitals mornitoring Bp, HR
- PO propranolol 40mg OD
- PO Carbimazole 10mg OD
- PO Rivaroxaban 20mg OD
- Initiated anti-HTN treatment on D2
- Basal insulin 10IU nocte, Actrapid 4IU pre-meals

Supportive management

- HOB at 30
- Catheterize and do Fluid balance
- Regular turning in bed
- Physiotherapy
- Feeding; 3 hourly

Follow-up

- Patient after one week of stabilisation had significant improvement of the symptoms.
- Reduced blood pressure (average BP 136/90), tremors, diaphoresis, palpitations
- Physiotherapy initiated, repeat TFTs pending, anti-thyroid antibodies pending

Disposition Plan

- Managed on endocrinology ward
- Fixed on basal bolus insulin
- Awaiting anti-thyroid antibody tests

Thank you