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# 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.



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# 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 <b>HR 145</b> <b>Bp 186/105</b>	Urgent 12 lead ECG IV access Pick off samples for investigations



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# Primary Survey (Emergency Assessment and Management)

D	Disability	<b>Semi-conscious GCS 11/15 (E3M5V3)</b> <b>Neck soft, PEARL</b> <b>Right hemiparesis, Right CN VII palsy</b> <b>RBS 12.4 mmol/l</b> <b>No seizures during assessment period</b>	<b>Recovery position</b> <b>Pass urethral catheter</b> <b>Urgent Brain CT scan (non-contrasted)</b>
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 5<sup>th</sup> 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	<p>Past Medical History</p> <p>Past Surgical History</p> <p>Past Gyn. History</p> <p>FSH</p>	<p>Hypertensive (poorly controlled) on treatment for the past 4/12, Index admission</p> <p>No history of surgery, blood transfusions or trauma</p> <p>P1+2, amenorrhea for past 1 year, Irregular periods for past 3 years</p> <p>Not married, has one child (son) who is 8years old, both parents still alive, no familial illnesses, No alcohol/smoking Hx</p>	
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	All essentially normal
Electrolytes	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 maintenance 500mls 6hrly
- Continuous vitals monitoring 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



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# 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



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Thank you