Common Emergency Presentations in HIV

Theme: 42/M with Headache

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INTERN DOCTOR



Case presentation (collateral h/x) N.H., 42/M newly diagnosed HIV patient, ART naïve reports to the emergency Dep't with 3/52 history

N.H, 42/M newly diagnosed HIV patient, ART naïve reports to the emergency Dep't with 3/52 history of severe throbbing generalized headache of gradual onset.

Associated with blurring of vision, altered levels of consciousness, photophobia, neck pain, projectile vomiting (non-billous, non-bloody) and high grade fevers.

No convulsions, no body weakness, no hearing impairment and no history of trauma.

There is also a 2/52 history of foul smelling non-bloody diarrhea. However no abdominal pain, no abdominal distension.

Primary survey

Airway and cervical spine	Patent as patient was able to talk (though confused)	
Breathing	RR-30,SP02-86% RA Chest is symmetrical, normal percussion note, Bilateral equal air entry, scattered coarse crepitations	Oxygen therapy via nasal prongs at 3L/minute
Circulation	BP=85/50mmHg, PR=115bpm (thin and thread), Warm extremities, CRT<3S, no pallor, no oedema, HS 1+2 heard, no added heart sounds.	IV access IV N/S 1L stat

Primary Survey Cont'd...

Disability	Semi-conscious, GCS of 12/15 (M5, V4, E3) Neck stiffness, Positive Kernig's sign RBS of 5.6mmol/L	Inserted NG tube
Exposure	Febrile to touch (Temp= 39oC), wasted, some dehydration P/A: Normal fullness, soft, non-tender, no palpable organs.	IV Paracetamol 1g TDS for 1 day Took samples for CBC

S	Signs and symptoms	Generalized severe headache, altered levels of consciousness, blurring of vision, neck pain, photophobia, projectile vomiting, fevers, reduced GCS of 12/15, neck stiffness and positive kernig's sign.
Α	Allergies	None
M	Medications	None
Р	Past medical history	Newly diagnosed HIV, ART naïve, unknown CD4 count
L	Last meal	8 Hours Ago
Е	Events	NO h/o trauma

Cont'd....

Working Diagnosis

Newly diagnosed HIV ART naïve with Advanced HIV Disease with:

- 1. Meningitis ?? cryptococcal
- 2. Septicemia

Differential DDX:

- 1. TB Meningitis
- 2. Encephalitis esp. viral
- 3. Toxoplasmosis
- 4. Cryptosporidiasis

Initial management plan

Investigations:

CD4 count.

serum CrAG.

CBC

Brain CT scan

Chest Xray

Sputum Gene Xpert

Urine LAM

Lumbar puncture (if no contraindication from CT scan finding) then CSF analysis

IV Paracetamol 1g TDS for 1 day

IV fluids R/L 2L over 3 hours, Re-assess BP then maintain at 1.5L over 24 hours

IV Cef 2g OD for 3 days

Investigational findings

CD4 count: 50

Serum CrAG: positive

CT scan: Normal

Chest Xray: Normal

Sputum Gene Xpert: Negative

Urine LAM: negative

CBC: Leukocytosis with

lymphocytosis and neutrophilia

LP findings

Opening pressure: 300mmH20

CSF CrAG: positive

CSF lactate: 2.4 mmol/L

CSF glucose: 60mg/dl

CSF gene Xpert: Negative

Final diagnosis

Newly diagnosed HIV, ART naïve with AHD with cryptococcal meningitis and septicemia

Management plan:

IV R/L 2L stat

IV liposomal Amphotericin B 770mg stat in 500mls of D5

IV KCl 20meq in 500mls of N/S over 2 hours

Tabs Flucytosine 7700mg in 4 divided doses (4:4:4:3) 6 hourly for 2 weeks

Tabs fluconazole 1200mg OD for 2 weeks

Tabs Septrin 960mg OD for 1/12

Tabs PCM 1g TDS for 3 days

IV Cef 2g OD for 3 days

Therapeutic Lumbar puncture after every other day

Follow up

Patient had serial therapeutic LPs done while on ward. OP of last LP was 40mmH2O

Patient's condition gradually improved while on ward, and was discharged on day 15 on tabs Fluconazole 800mg and Septrin 960mg.

Patient linked to the HIV clinic for continuous follow up.

Not yet initiated on ART at the time of discharge.