



03/18/21 Morning Report with @CPSolvers



Case Presenter: Gabriel Talledo (@gabrielalledo) Case Discussants: Sharmin Shekarchian (@Sharminzi) and Rabih Geha (@rabihmgeha)

CC: 39M presents to ED with headache and fever

HPI:

Started 2 months prior visual hallucinations; notes ‘people were searching for him, trying to send him to prison’

1 month prior- HA started, predominantly in the occipital region, bilateral and pulsatile

3 weeks before- hearing voices, hears a demon, tells him to kill himself/escape from home

ROS: weight loss (unknown amt)

PMH:
Pulm TB ?? 2005
2010- Dx with Schizophrenia

Meds:
Olanzapine 5 (initially inconsistent, but has been consistent 5 mo prior)

Fam Hx:
From north of Peru

Soc Hx:
wnl
Health-Related Behaviors:
wnl

Allergies:
n/a

Vitals: T: AF (37 C) HR: 92 BP: 120/60 RR: 20 SpO₂:

Exam:

Gen: skinny

HEENT:

CV: wnl

Pulm: wnl

Abd: wnl, no HSM

Neuro: Glasgow 15/15, no Kernigs, No Brudzinski sign, no focal neuro deficits, no nuchal rigidity

Extremities/Skin: no rash

Notable Labs & Imaging:

Hematology:

WBC: 7 (N 65%, Eos 5%, L 20%) Hgb: 13.3 MCV: 82 Plt: 211

Chemistry:

Na: 143 K: 5 Cl: 105 CO₂: BUN: Cr: 0.8 glucose: 100

Ca: 15 Phos: 2 Mag: PTH: 95 (ref <50)

AST: ALT: Alk-P: 80 GGT: 22 T. Bili: 0.4 Albumin: 4

Urea: 20 PT: 16 INR: 1.2

HIV: neg, Hep B: neg, RPR: neg, AFB stain of sputum- neg
CSF: op 10, gluc 33, WBC 88 (N 100%), Prot 117, india ink- neg; gram stain- neg; AFB- neg; Fungi/Bacterial Cx- neg

Imaging:

EKG: wnl

CXR: wnl

MRI: signs of meningitis in the interpeduncular cistern and R para-pontine region

Final Dx: PCR of CSF: TB pos; continued workup of primary hyperparathyroidism

Problem Representation: 39M with pmh schizophrenia presents with subacute headache, visual/ auditory hallucinations, & weight loss with labs notable for hyperCa, elevated PTH, and CSF studies with neutrophilic pleocytosis and MRI c/w meningitis. Final Dx confirmed with PCR of CSF as tuberculous meningitis.

Teaching Points (Rafa):

● **APPROACHING YOUNG MALE WITH HEADACHE AND FEVER**

Headaches

Primary : migraine (pulsating pain w/ photophobia/phonophobia), cluster (periorbital pain), tension (steady, “band-like” pain)/ secondary headache (infection, malignancy)

Fever

When (time course)? What (clinical syndrome)? Who (PMH)? Where (epidemiology)?

● **HALLUCINATIONS**

Auditory type is common in schizophrenia

Decompensation? Unrelated new hallucination (visual is more with drug intoxication)

Visual + auditory - different regions of the brain involved - suspect of systemic causes leading to encephalopathy

● **OLANZAPINE**

Atypical antipsychotic - fewer EPS and anticholinergic SE than typical antipsychotics

Used in schizophrenia, bipolar disorder, OCD, mania, Tourette syndrome
SE: metabolic syndrome, QT interval prolongation

● **HYPERCALCEMIA**

PTH (hyperparathyroidism - low PO₄), PTHrp (squamous cell carcinoma), Vitamin D (1,25 OH vitamin D intoxication / activation of vitamin D by processes like sarcoidosis)? Ingestion of Ca (Milk-alkali syndrome)

● **NEUTROPHILIC PLEOCYTOSIS IN THE CSF**

Almost pathognomonic to infection. Few exceptions like craniopharyngioma