AMERICAN OSTEOPATHIC ASSOCIATION

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OCT 15-18 — VIRTUAL

Medical Mimics of Psychiatric Disorders

Karen Lommel, DO, MHA, MS

Chair, Department of Psychiatry & BH CMO with Prisma Health

Professor, UofSC School of Medicine Greenville

Attending Physician in Emergency Medicine, Adult & Child Psychiatry

Disclosures

I have no actual or potential conflict of interest in relation to this presentation.

Learning Objectives

- Discuss assumptions and pitfalls
- Improve your evaluation of patients with mental illness
- Review medical conditions that can mimic psychiatric disorders
- Describe a streamlined evidence-based approach for decision making in this patient population

Incorrect Assumptions

- Triage as psychiatric → psychiatric issue
  - 25 yo feeling anxious, "can't breathe," h/o anxiety
  - 25 yo short of breath, tightness in chest, 2 wk postpartum
- Previous psychiatric visits → psychiatric issue
- Young patient → psychiatric issue
  - Patients <55 yo are 4x more likely to have missed organic cause for presumed psychiatric illness
- Abnormal vital signs → emotional state/stress

Pitfalls

- Cursory history, limited sources
- Incomplete ROS
- Incomplete physical and neuropsych exam
- Failure to review medications
- Limited, protocol-driven testing

Systematic Approach to Organic Mimics

ABC's of Organic Mimics

A&B: **A**irway and **B**reathing

C: **C**NS and **C**ardiovascular

D: **D**rugs and Medications

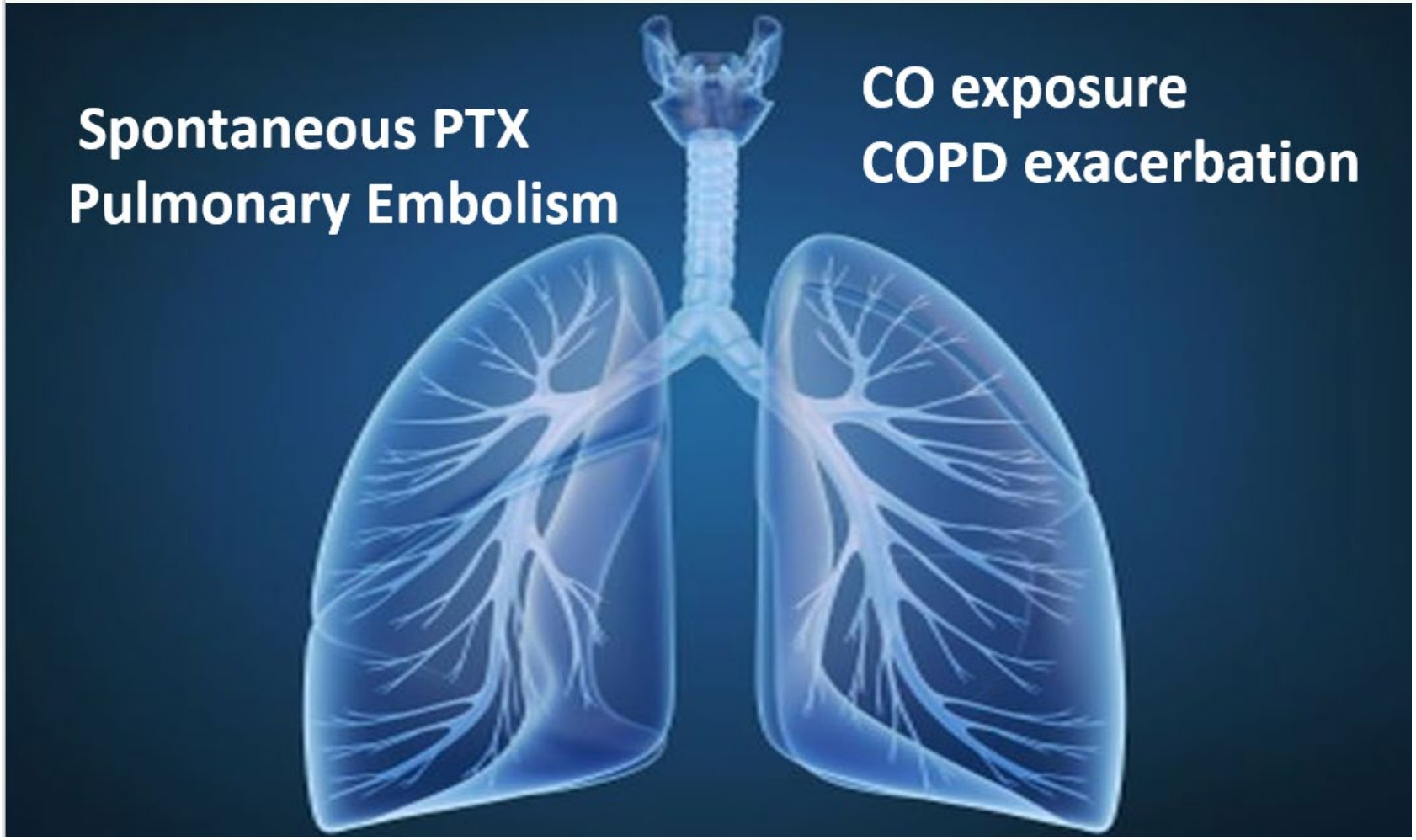
E: **E**lectrolytes and Endocrinology

F: **F**ever (and chills)

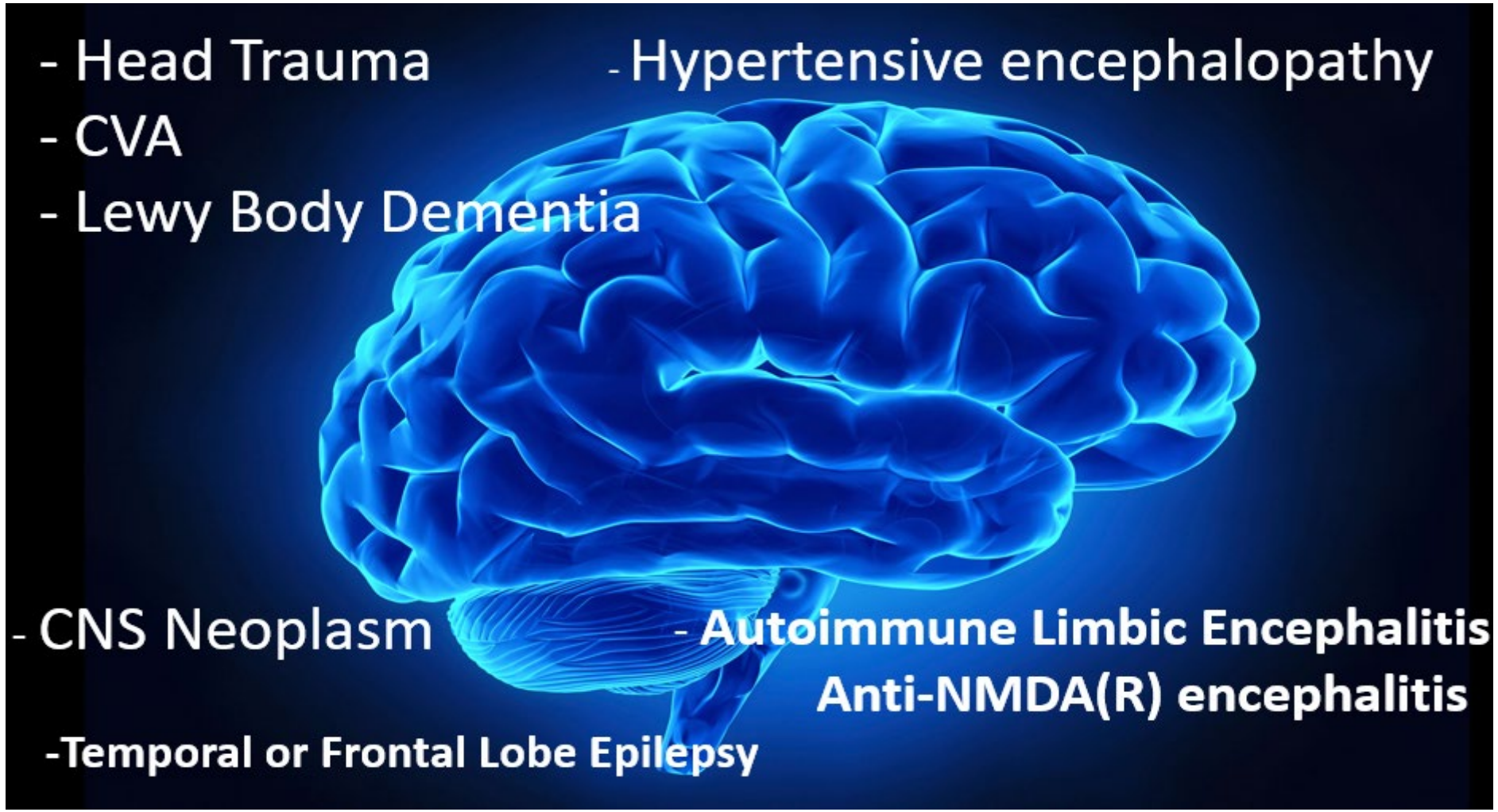
G: **G**o to Other Conditions

Adapted from Dorsey ST, Bazarian JJ and Roth T

A&B: Airway and Breathing



C: CNS and Cardiovascular



D: Drugs and Medications

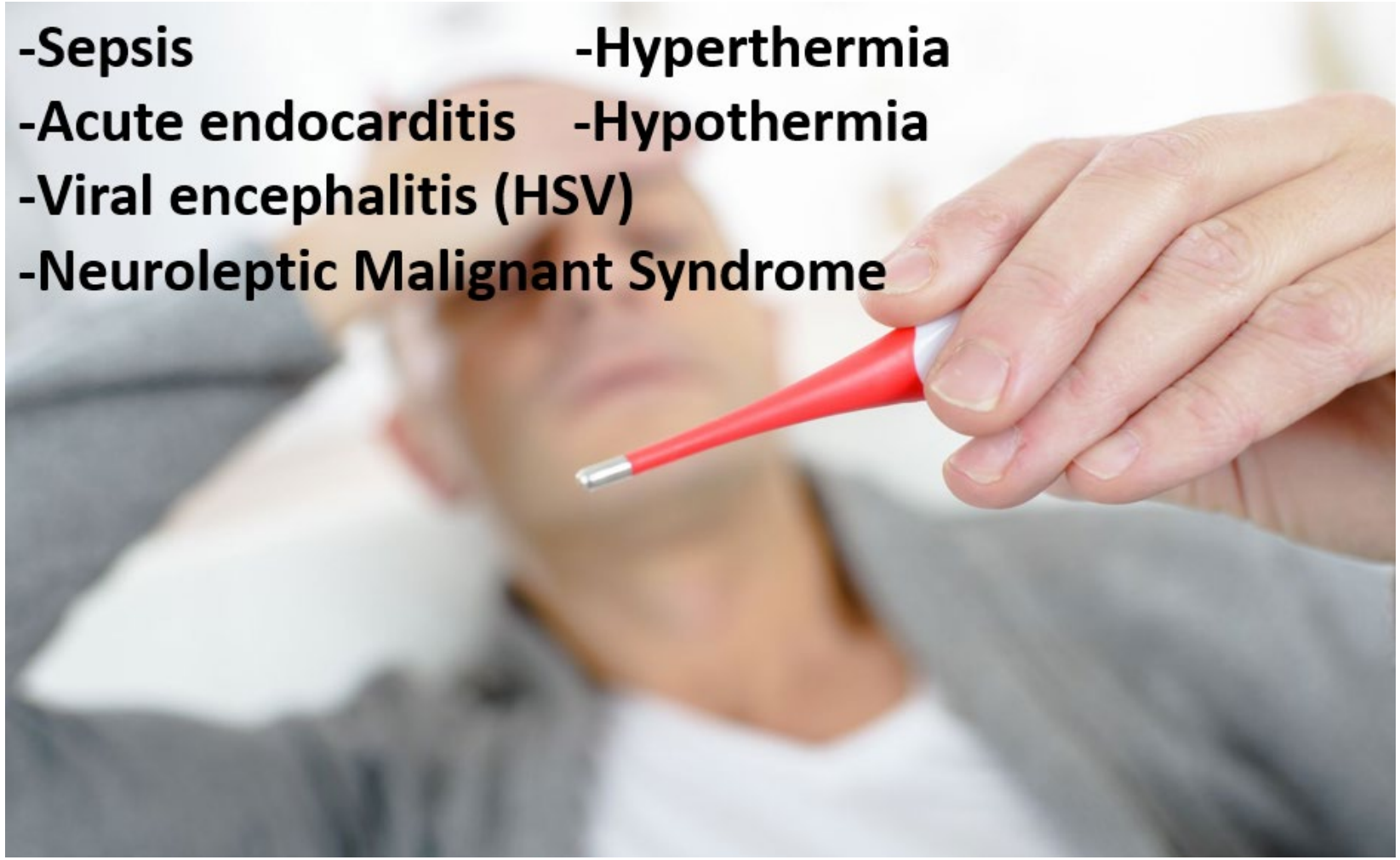
-Acute intoxication with drugs of abuse
-Withdrawal syndromes
-OTC allergy and cold meds
-Herbal remedies
-Appetite/Stimulants
-Steroids
-Serotonin Syndrome
-**DISCONTINUATION**

E: Electrolytes and Endocrinology

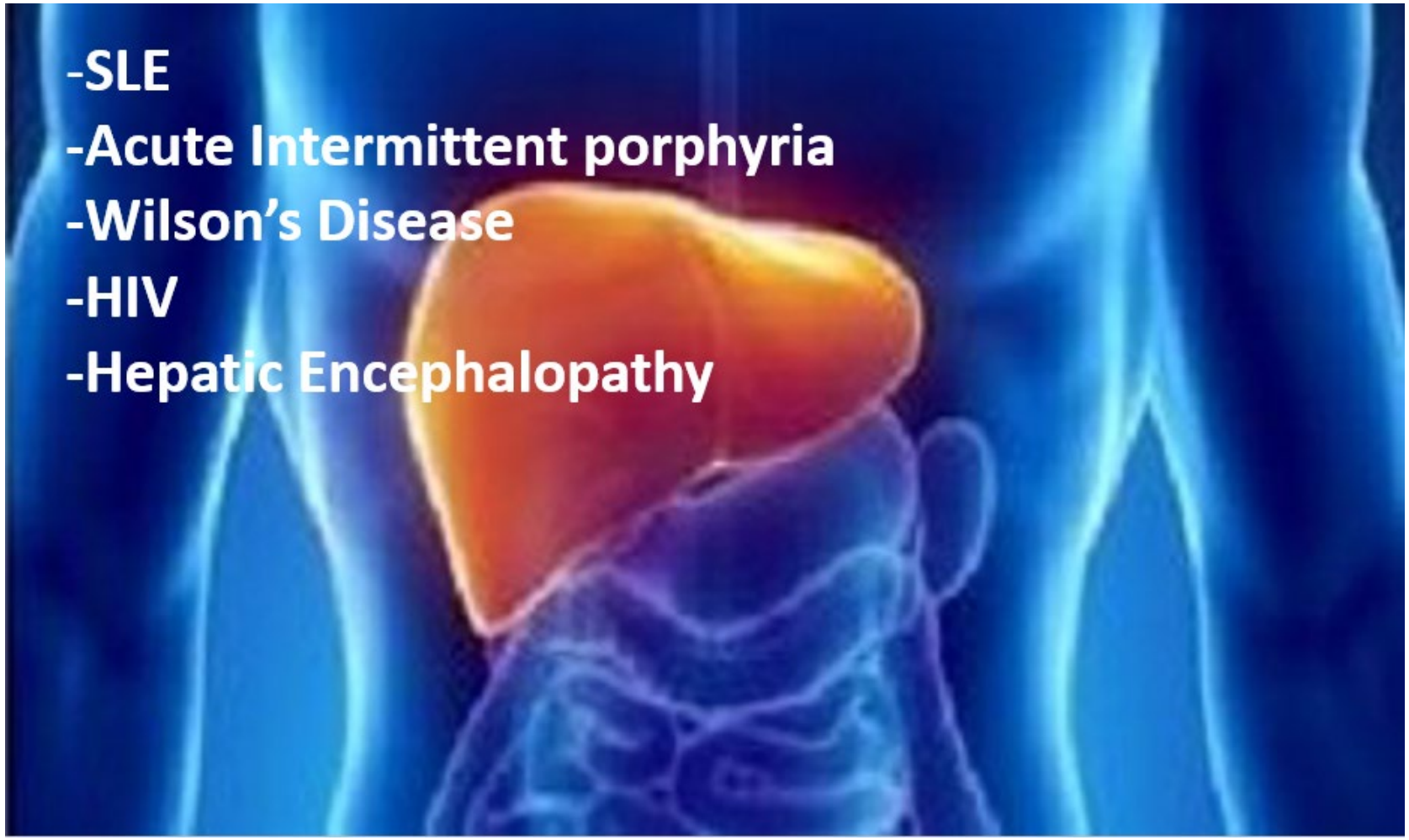
Glucose ⬇
Sodium ⬆⬇
Calcium ⬆⬇
Magnesium ⬇
Potassium ⬇

Thyroid ⬆⬇
Adrenal ⬇

F: Fever (and a chill)



G: Go to Other Conditions



Case Study

65 yo female with NO documented **psychiatric history** presented to community hospital with **SI** after she was driving home from the ED for previous visit for chest pain she felt was due to a heart attack. While driving home with husband she had a sudden impulse described as a "**lightening bolt striking my head**" which prompted her to say "**if I had a gun I would shoot myself**." This is very uncharacteristic for patient.

She has had **profuse diarrhea** over past few weeks and 10-20 lb **weight loss** for which she is being evaluated by GI. She has also been experiencing insomnia over past 1-2 weeks. She was prescribed **Ciprofloxacin for UTI 2 weeks** ago. **Discontinued Lyrica 2 months ago and Methotrexate 1 month ago, past Stelara injections**.

Case Study (2)

PMHX: Inflammatory Arthritis (RA vs. PsA)
Psoriasis

PSHX: None

PSYCH Hx:
No past medications
No past psychiatric admissions
No past SI/SA

SOCHX:
Married with 1 adult child
No history of alcohol, tobacco or substance abuse

Current Medications:
Vitamin B-12 q30 days
Methotrexate – off x 1 month due to diarrhea
Pentoxifyline (Trental)
Ustekinumab (Stelara) – monthly injection
Verapamil
Zoledronic Acid (Reclast) annual injection

Course

- Patient “boarding” in community ED x 3 days
  - Waiting for inpatient psychiatric bed
  - Worsening symptoms with hyper-religiosity
  - Severe agitation resulting in Haldol and Ativan administration

- Transfer to tertiary referral center...

Mental Status Exam

General Appearance: Asleep, but easily awakened and answers with delusional thought content but oriented to person, place and time

Speech: Quiet, slow at times

Psychomotor: Mild retardation

Eye contact: Fair

Mood: Did not answer

Affect: flat

Thought Process: tangential

Thought Content: delusional thought content. Stating she is "here to become God's ambassador"

Cognitive Function:

Orientation: Oriented to person & place

PHYSICAL & NEURO EXAM:

Normal other than noted above

Medical Work-Up

- CT Scan Head
- Labs/UA
- MRI
- EEG
- LP with extensive testing
- GI work-up including CT scan A/P
  - Continue GI w/u and consider paraneoplastic
- Autoimmune and Infectious labs

Differential Diagnosis

- UTI in older patient
- Cipro-induced psychosis in elderly
- CVA
- Anti-NMDA encephalitis (autoimmune)
- Undiagnosed depression
  - Depression with Psychotic Features
- Delirium
  - Electrolyte or Thyroid
- Lewy Body Dementia (Neurocognitive Disorder w/Lewy Bodies)
- HSV Encephalitis (or other infectious)

Cipro Induced Psychosis

- Case reports of psychosis with fluoroquinolones
  - Ciprofloxacin noted
    - Elderly more frequent
  - Rarely with topical fluoroquinolones
  - Remits when discontinued
- Glutamatergic neurotransmission (?)

Types of Autoimmune Encephalitis

Table 1. Clinical clues in the recognition of particular types of autoimmune encephalitis

Clinical finding	Associated autoantibody disorders
Psychosis	NMDAR, AMPAR, GABA-B-R
Dystonia, chorea	NMDAR, Sydenham chorea, D2R
Hyperekplexia	GlyR
Status epilepticus	Most characteristic of GABA-B-R and GABA-A-R but NMDAR is much more common; may occur in other types as well
New onset type 1 diabetes	GAD65
Fasciobrachial dystonic seizures	LGI1
Neuromyotonia, muscle spasms, fasciculations	Caspr2
Stiff-person syndrome and/or exaggerated startle	GAD65, GlyR, Amphiphysin (with GAD65 being most common in stiff person/stiff limb and GlyR in PERM, and Amphiphysin in women with breast cancer)
CNS (myoclonus, startle, delirium) and gastrointestinal hyper-excitability	DPPX
Cranial neuropathies	Ma2, Hu, Miller-Fisher, Bickerstaff (but also infections like Sarcoidosis, Lyme, TB)
Cerebellitis	GAD65, PCA-1 (Yo), ANNA-1 (Hu), DNER (Tr), mGluR1, VGCC

CNS: central nervous system, TB: tuberculosis.

2 J Clin Neurol 2016;12(1):1-13

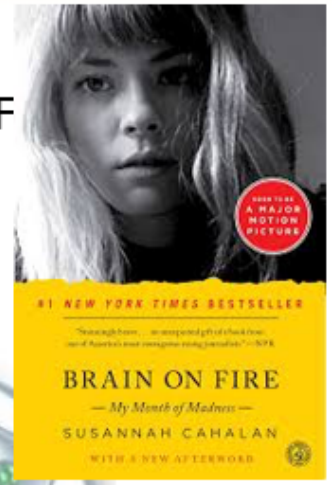
Anti-NMDA Receptor Encephtalitis

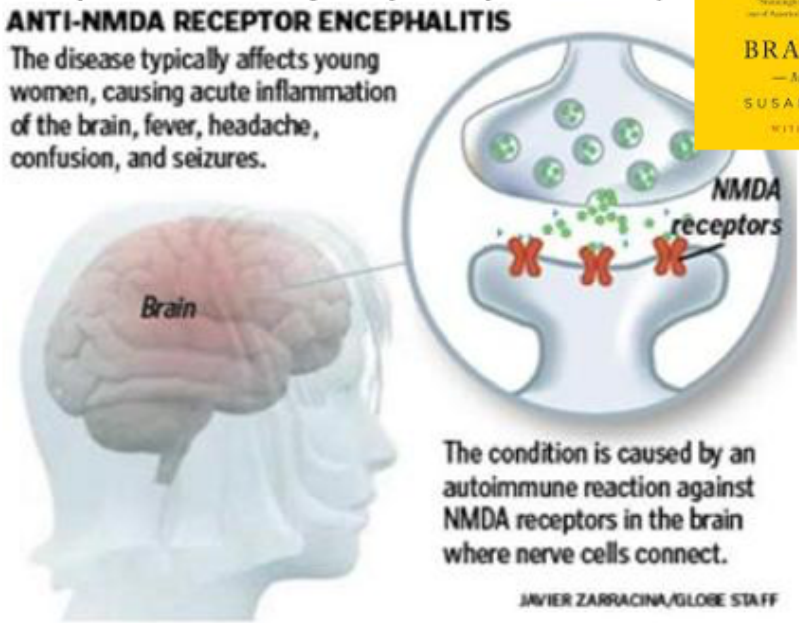
-Sudden onset **psychosis and behavior changes**

-Definitive diagnosis - anti-NMDAR (NR1) antibodies in Blood or CSF

-Consider presence of tumor (especially ovarian teratomas)

-Early treatment with immunotherapy (IVIG, high dose steroids plasma exchange, rituximab, azathioprine, and cyclophosphamide)

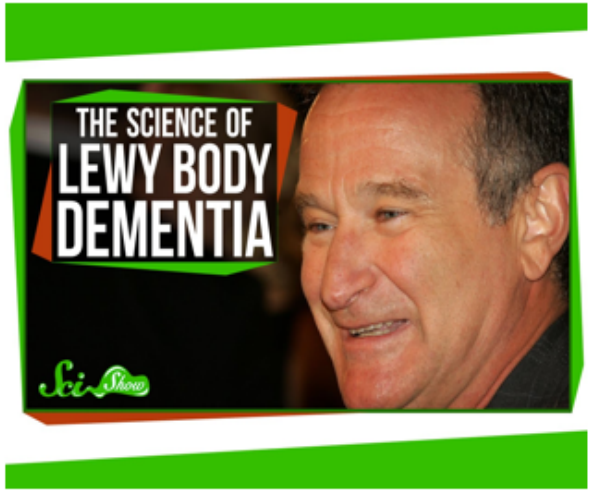




Lewy Body Dementia (LBD)

3 Core Features of Diagnosis

1. Fluctuating attention & alertness
2. Hallucinations (visual, detailed)
3. Spontaneous features of parkinsonism
   - Depression and Sleep Disturbance common

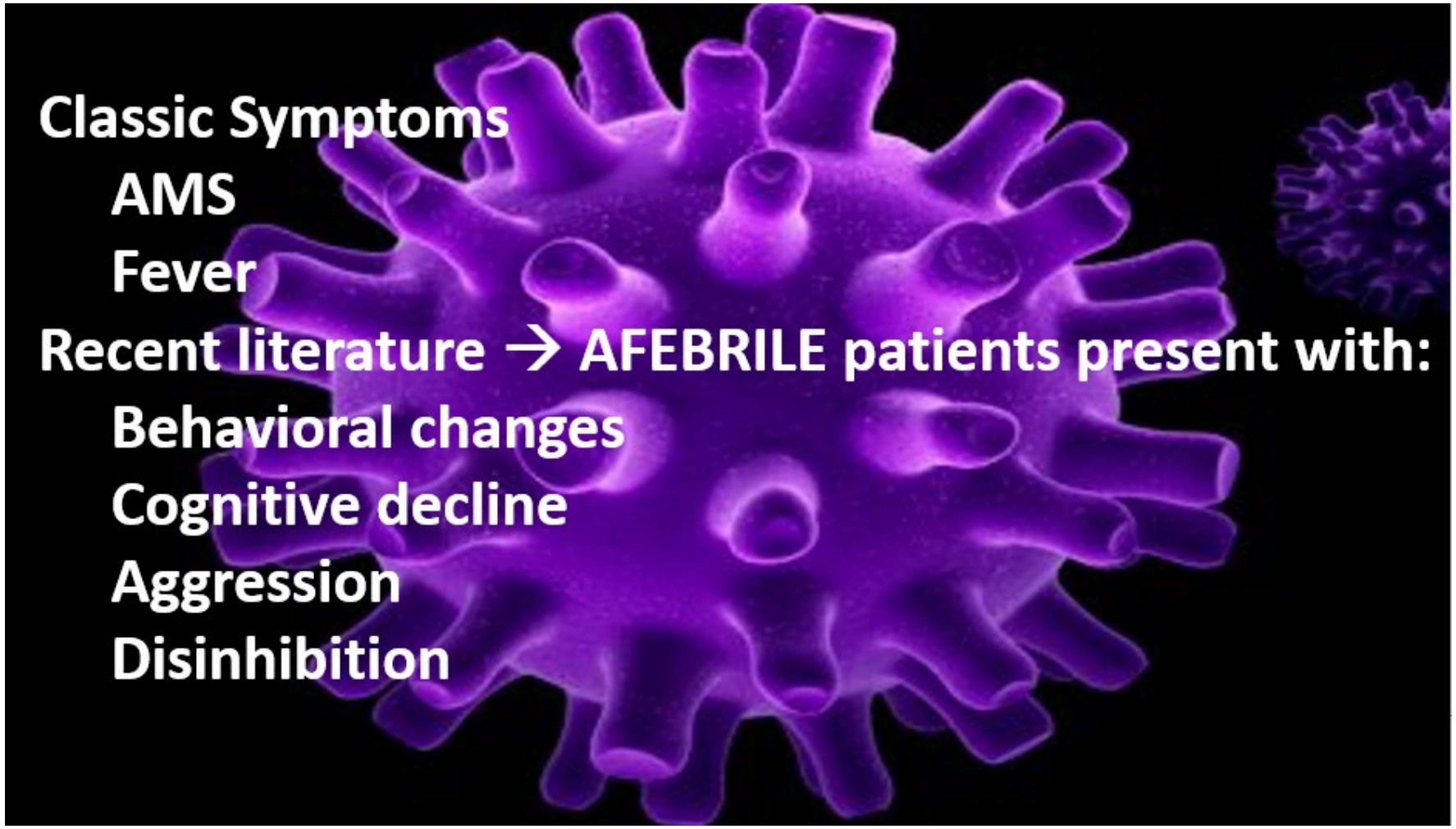


Actor Robin Williams

Treatment Dangers with Lewy Body Disease

- Anti-parkinsonism agents → worsen delusions and AVH
- Antipsychotics → worsen parkinsonian symptoms
- Anticholinergics → worsen cognitive deficits

Herpes Simplex Encephalitis



Results

STUDY	RESULT
UA	Negative
CBC	Normal
CMP	Normal
Sed Rate	Normal (7)
Sjogren's Ab	Negative
B12	Elevated 1248 (200-835)
CSF	Protein 48 (only abnormality)
Autoimmune	Negative
RPR	Non-Reactive
Lyme 39, 41, 58	Reactive (all others NR)
HSV	Not Detected
CT scan Head	Sm right basal ganglia lacune
MRI Head	Negative

ED Course

- Patient “boarding” in ED x 3 days
  - Waiting for inpatient psychiatric bed
  - Worsening symptoms with hyper-religiosity
- Transferred to tertiary referral center
  - Medical work-up escalated with neurology consult
- Admit to hospitalist x 2 days
- Transfer to inpatient psychiatric unit

Systematic Approach

Organic Etiology	Psychiatric (Functional) Etiology
Age <12 or >40	Age 13-40
Sudden onset	Gradual Onset (weeks to months)
Fluctuating Course	Continuous Course
Disorientation	Scattered thoughts
Visual/Olfactory/Tactile Hallucinations	Auditory Hallucinations
No Psychiatric History	Psychiatric History
Emotional lability	Flat Affect
Abnormal VS or Exam	Normal Exam

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Take Home Points

- Remember the ABC's of Organic Mimi
- Consider autoimmune/paraneoplastic encephalitis in your patient with psychosis
- Case reports of Cipro-induced psychosis in elderly
- Dementia with Lewy Bodies (Psychosis, depression, sleep disturbance, parkinsonism)
- HSV encephalitis in AFEBRILE patient

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"Even nuts get orchitis"
- quote from general surgeon

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