

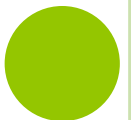


**SYMPTOM MIMICRY:  
MEDICAL ILLNESS IN A  
PSYCHIATRIC WORLD**

**Margaret Lamkin, DO  
July 25, 2017**

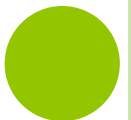
# OBJECTIVES

- 1) Understand that many general medical conditions may present with psychiatric symptoms
- 2) Identify diseases which may mimic depression, anxiety, psychosis and dementia
- 3) Know when to refer patient to PCP for additional testing



# INTRODUCTION

- Psychiatry is an integral part of medicine
- 10% of psychological symptoms are the result of a medical illness
- Misdiagnosing may be problematic and dangerous for patient
- Nonmedical personnel may miss underlying physiologic causes
- Maintain a high degree of suspicion and consider non psychiatric origins for some symptoms



## EXAMPLE

- In New Zealand a 29 year old female treated for four years by psychiatrist for PTSD and borderline personality traits
- Manifested symptoms of depression and memory impairment
- Later underwent brain studies and was found to have a left thalamic tumor—even though she did not develop typical focal signs



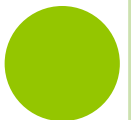
# Four common psychiatric symptoms manifested in diseases

- I) Depression
- II) Anxiety
- III) Psychosis
- IV) Dementia



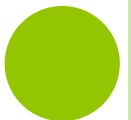
# I. DISEASES WHICH MAY PRESENT AS DEPRESSION

1. MS
2. Stroke
3. Heart disease
4. Chronic pain (fibromyalgia)
5. Thyroid disease
6. Miscellaneous



# 1. MULTIPLE SCLEROSIS

- An autoimmune demyelinating disease
- Up to 2/3 individuals initially presented with a depressive-like mood disorder and never fully recovered despite appropriate treatment
- Other common symptoms: cognitive dysfunction, fatigue, mood swings as disease progresses
- Depression in MS affects memory, attention and concentration



## 2. STROKE

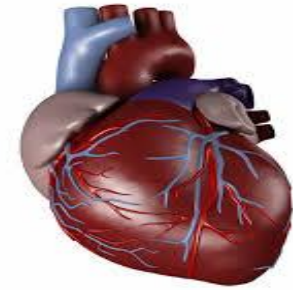
- Brain bleed: older patients may have chronic slow bleed after a fall, presenting with symptoms weeks to months later
- Post acute stroke depression correlates with poor outcome at one year

Ex: 78 year old man with severe depression and behavioral disturbance found to have had a stroke. Only neurological symptom was mild facial paralysis.





# 3. HEART DISEASE

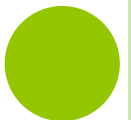


- Depression is a risk factor for cardiac disease and cardiac disease is a risk factor for depression
- Major depression occurs in 1/3 of patients post heart attack, open heart surgery
- Increased risk for suicide post myocardial infarction (in individuals with no previous psychiatric history)



## 4. CHRONIC PAIN

- Chronic pain may limit multiple areas of life: social, occupational, sleep, relationships (diseases like fibromyalgia)
- Patients may feel angry, isolated, helpless, fearful
- Many times it is hard to distinguish an underlying psychiatric illness from those whose psychiatric symptoms arise secondary to pain
- Lack of pleasure and absence of control

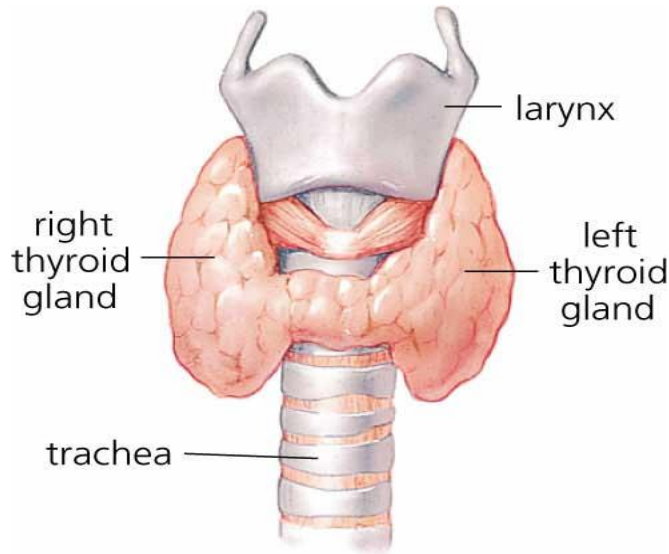


# 5. THYROID DISEASE

<i>Under Active</i>	<i>Over Active</i>
Intolerance to cold	Intolerance to heat
Weight gain (and decreased appetite)	Weight loss (and increased appetite)
Periods very heavy	Periods often stop or become light/infrequent
Tired all the time	Tired but restless
Depression/slowing of thought processes	Anxiety/
Constipation	Diarrhoea/loose bowel movements
Hair thinning/dry coarse hair	Hair thinning
Goitre (swelling in the neck)	Goitre (swelling in the neck)
Slow heart rate even when exercising	Fast heart rate even at rest

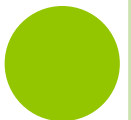
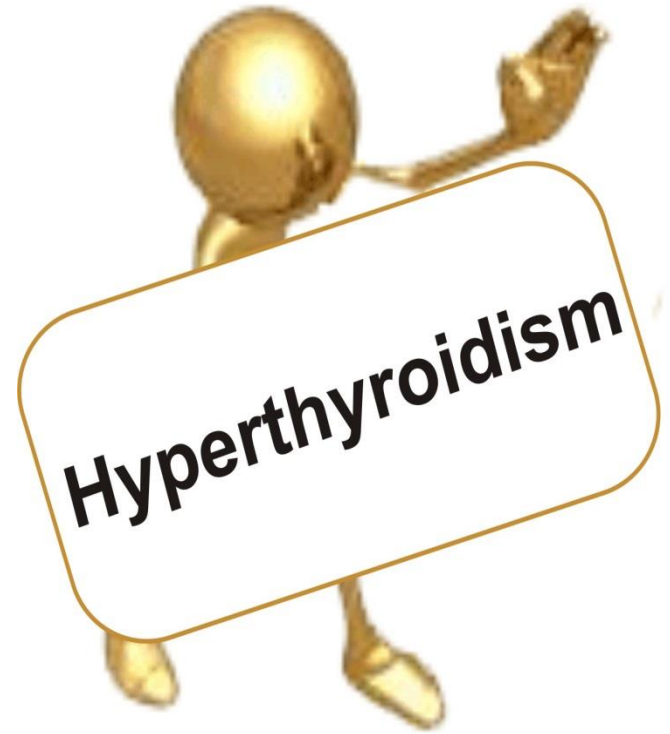
# HYPOTHYROIDISM

- **Hypothyroidism:** May present with **depression, anxiety, apathy**, psychomotor retardation, poor memory, myxedema madness.
- **Physical complaints:** cold intolerance, weight gain, dry and thin hair, constipation, delayed and slow reflexes



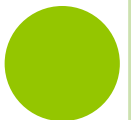
# **HYPERTHYROIDISM**

- **Anxiety, confusion, agitated depression**
  
- **Physical complaints: heat intolerance, diaphoresis, weight loss, increased appetite, palpitations, tachycardia**



## 6. OTHER DISEASES WHICH MAY PRESENT WITH DEPRESSION

- **Polymyalgia Rheumatica:**  
malaise, fatigue, anorexia, weight loss
- **Systemic Lupus Erythematosus (Lupus):** depression, delirium, even psychosis



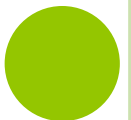
## General medical conditions causing or contributing to major depression ('Secondary Depression')

<b>Drugs and Poisons</b>
Alcohol, beta blockers, steroids, opiates, barbiturates, withdrawal from cocaine and amphetamines, heavy metal poisoning, cholinesterase inhibitors, cimetidine, chemotherapy agents
<b>Metabolic/Endocrine</b>
Hyper and hypothyroidism, severe anemia, hyperparathyroidism, hypokalemia, hyponatremia, Cushing's disease, Addison's disease, uremia, hypopituitarism, porphyria, Wilson's Disease, Wernicke-Korsakoff's syndrome
<b>Infectious Diseases</b>
Tuberculosis, Epstein-Barr infection, HIV, pneumonia, postinfluenza, tertiary syphilis, encephalitis, and post-encephalitic states
<b>Neurodegenerative and Demyelinating Diseases</b>
Alzheimer disease, multiple sclerosis, Parkinson disease, Huntington's disease
<b>Other Neurologic</b>
Subdural hematoma, normal pressure hydrocephalus, strokes, post-traumatic brain injury syndromes, cerebral tumors
<b>Neoplasia</b>
Carcinomatosis, cancers of the pancreas, lung, breast, and others
<b>Others</b>
Systemic lupus erythematosus, other collagen vascular disorders, other chronic inflammatory or auto-immune disorders, heart failure

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## II. DISEASES WHICH MAY MIMIC ANXIETY

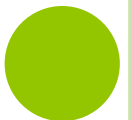
- 1) Thyroid disease
- 2) Pheochromocytoma
- 3) Caffeine or stimulant use



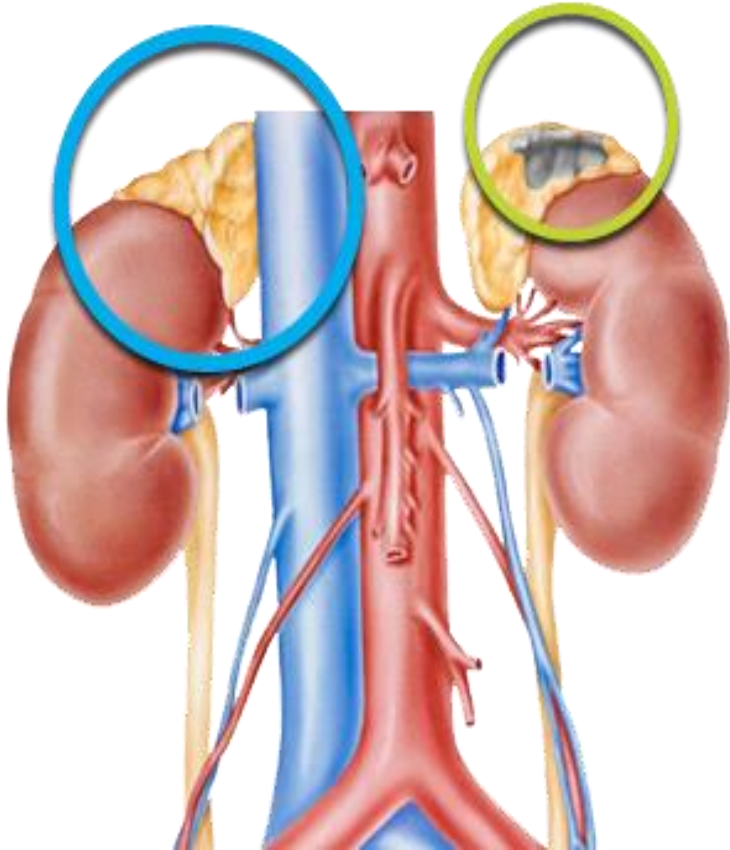


# 1. THYROID CONDITIONS: CHAMELEONS

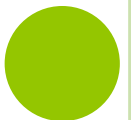
- Manic behaviors, description of heart racing or what seem to be “panic attacks”
- Anxiety, restlessness, irritability, emotional lability, insomnia with difficulty concentrating
- Treatment usually leads to improvement



## 2. PHEOCHROMOCYTOMA



- Tumor of adrenal gland
- Secretes catecholamines
  - Epinephrine
  - Norepinephrine
- Increases sympathetic nervous system activity



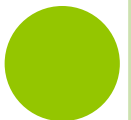
# CLINICAL SIGNS: PHEOCHROMOCYTOMA

- Anxiety
- Palpitations
- Diaphoresis
- Headache
- Tachycardia
- Pallor
- Weight Loss

**Diagnosis: 24 hour  
urine test**



**Treatment: surgical  
resection of tumor**



### 3. STIMULANT MEDICATION USE

- Caffeine: Nervousness, insomnia, irritability, panic attacks, and generalized panic disorder
- Cocaine: Euphoria, alertness, energy, anxiety (even associated with suicidal ideations), sleep disturbance, paranoia and hallucinations
- Amphetamines: Increase dopamine and norepinephrine in brain, leading to anxiety, euphoria, aggression
- Spice/ bath salts: cannibalism



# III. DISEASES WITH PSYCHOTIC MANIFESTATIONS

- 1) Demyelinating diseases
- 2) Herpes Simplex encephalitis
- 3) SLE (Lupus)
- 4) Lewy Body form of Parkinson's
- 5) HIV encephalopathy
- 6) Miscellaneous rare diseases



# 1. Demyelinating diseases

MS: 32% MS presentation of acute psychosis associated with stress

# 2. Herpes simplex encephalitis

Cause: viral encephalitis

- Symptoms: bizarre behaviors, seizures, olfactory/gustatory hallucinations, personality changes, psychosis

**Treatment IV Acyclovir**

- Example: catatonic stupor in a 19 year old woman (diagnosed as schizophrenia later found to have herpes simplex encephalitis)

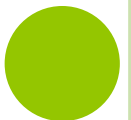


# 3. LUPUS

- 5% of patients develop psychosis within a year of diagnosis
- Bizarre thinking, including delusions and hallucinations
- Delirium and “clouding of consciousness” mostly at night
- Catatonia

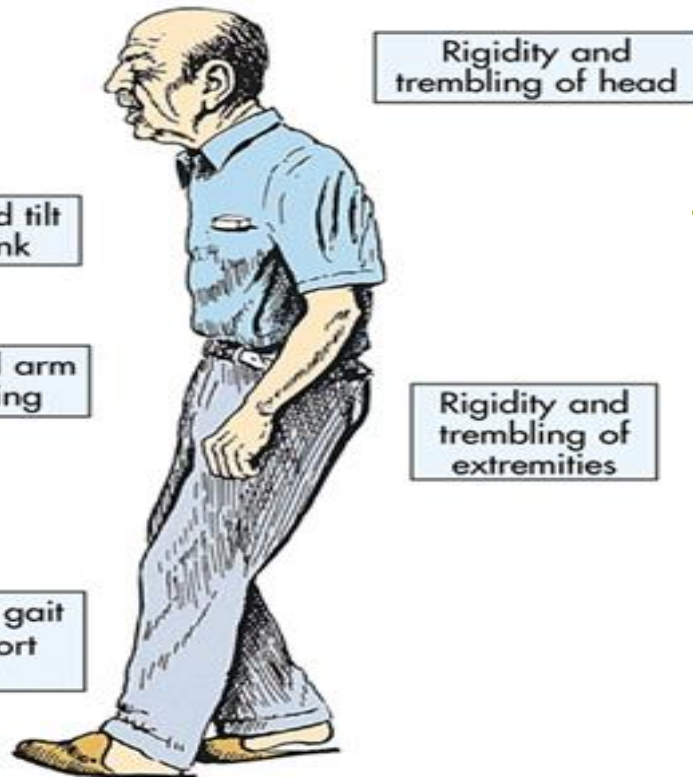


**In some cases require antipsychotic medications**

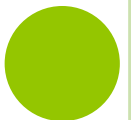


## 4. LEWY BODY DEMENTIA

- Visions of little people or children may precede Parkinson's symptoms
- Seeing shapes, colors
- Ongoing dialogue with deceased loved ones
- Perceptions of objects moving



**A form of Parkinson's disease**





# 5. HIV ENCEPHALOPATHY

- Nonspecific CNS changes, cognitive impairment
  - Depression
  - Dementia
  - Psychosis
  - Delirium
  - Mania
- 
- One of the leading causes of dementia in patients less than 60 years old



# 6. RARE DISEASES WITH PSYCHOTIC FEATURES



## A. Creutzfeldt-Jakob disease

Rapidly progressing

Vague symptoms initially: fatigue, sleep disturbance, weight loss, anxiety

Dementia, myoclonus

Death within 1 year

## B. Huntington's disease

Behavioral disturbance, executive impairment

Delusions, OCD behaviors may occur

Depression, withdrawal, apathy

Late onset memory impairment



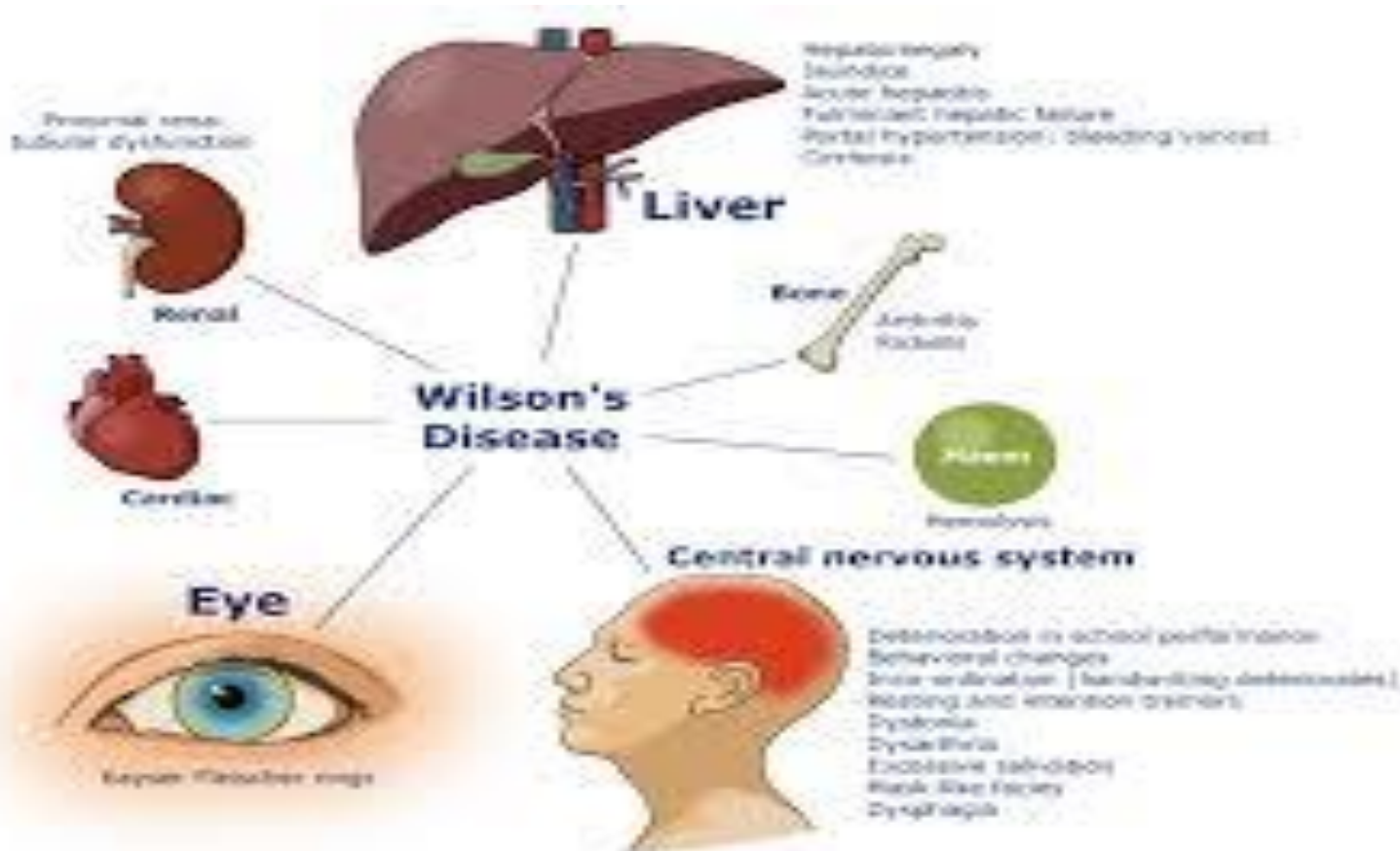
# C. WILSON'S DISEASE

Autosomal recessive disorder: copper toxicity in brain and liver

Damage to basal ganglia

Movement disorders such as dystonia, tremor

Loss of emotional control, depression, memory loss



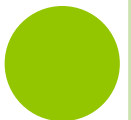
# IV. DISEASES WITH DEMENTIA/ DELIRIUM

- 1) Urinary tract infection
- 2) Lyme disease
- 3) Anemia: vitamin B12 or folate deficiency
- 4) Neurosyphilis



# 1. UTI IN ELDERLY

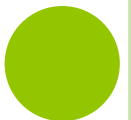
- Acute hallucinations: seeing insects crawling on the ceiling
- Confusion
- Paranoia
- Delirium



## 2. LYME DISEASE: THE NEW “GREAT IMITATOR” OF PSYCHIATRIC ILLNESS

In the late stages the following symptoms may be seen:

- Agoraphobia
- Hearing voices
- Confusion
- Agitation
- Anorexia
- Inappropriate laughter
- Mistaken for schizophrenia



### 3. ANEMIA

#### **B12 deficiency:**

- Weakness, irritability, dementia
- Sensory disturbance
- Often asymptomatic
- Some association with Alzheimer's

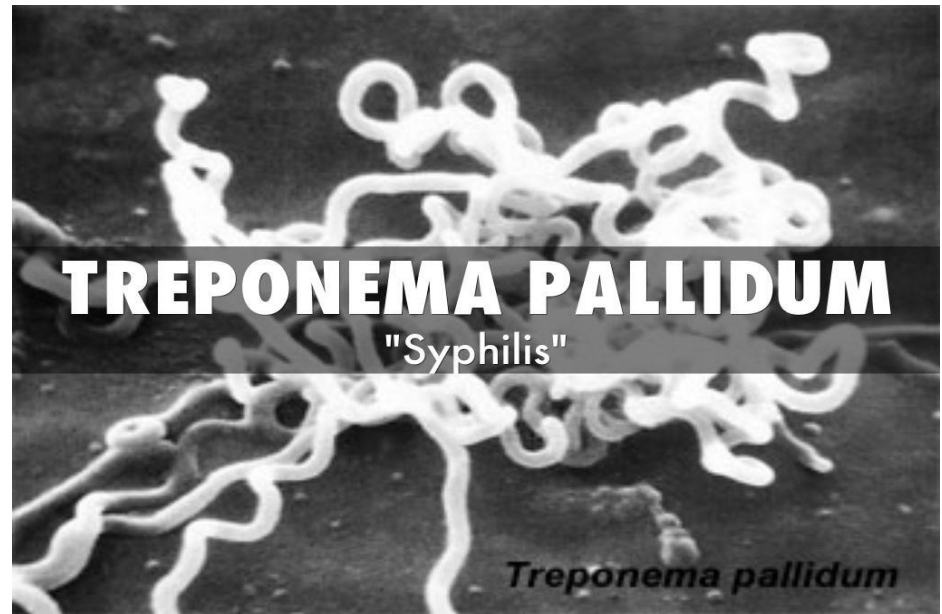
#### **Folate deficiency:**

- depression, dementia, confusion, diarrhea



## 4. NEUROSYPHILIS

- Personality changes
- Irritability
- Mania
- Decreased self care
- Progressive dementia



**Infection: Treponema Pallidum**

**Dementia may be a sign of tertiary syphilis**

**Occurs 10-20 years after initial infection with syphilis**

**Mainly affects frontal lobes**





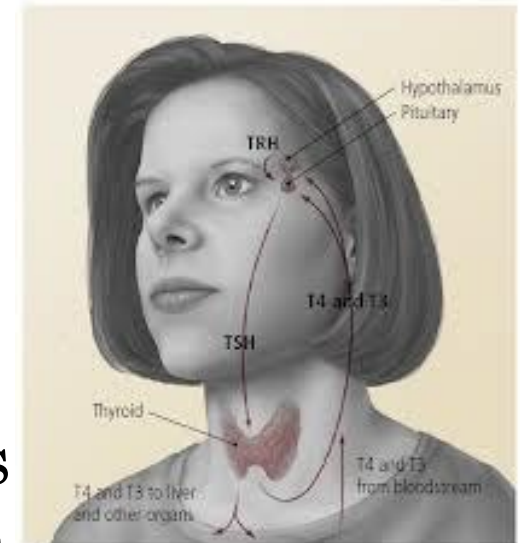
# DON'T FORGET MEDICATIONS!!!



- 48 year old female with PMHx of HTN switched from HCTZ to methyldopa presented with new onset depression. Once medication was changed back she experienced a full recovery
- Otherwise happy, successful teenager with acne, becomes isolated, depressed, suicidal: on Isotretinoin

**Ask about any changes in lifestyle including medication changes!**

# 1. THYROID OR DEPRESSION?



- A 44 year old overweight female undergoes psychotherapy for 3 years for sadness, fatigue, feeling hopeless and unmotivated. After no change she sought a second opinion and was found to have hypothyroidism.
- Once on appropriate treatment all symptoms resolved.

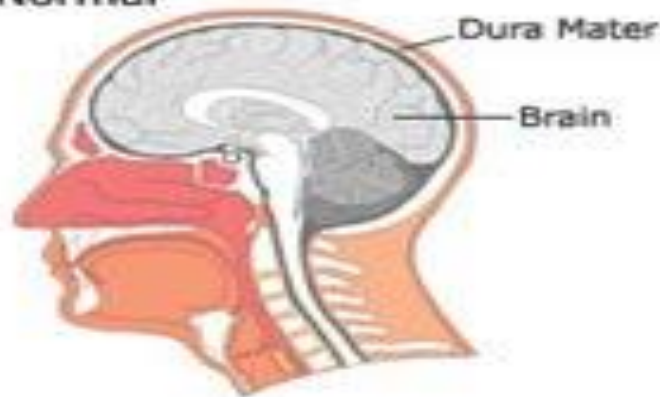


## 2. SUBDURAL HEMATOMA OR PSYCHOSIS?

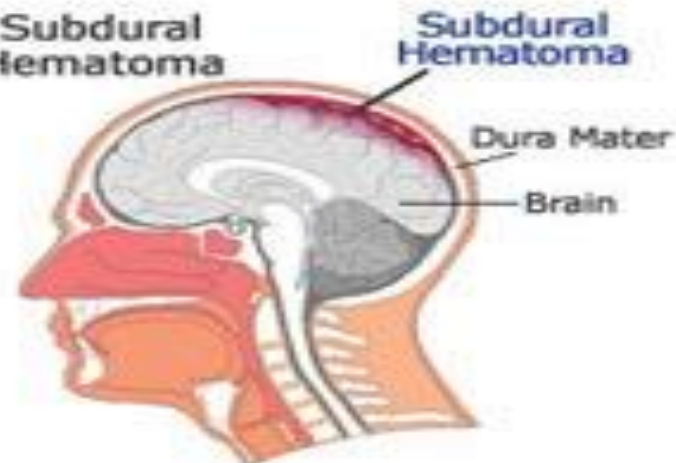
- 24 year old man brought to ER by police for bizarre behavior, disorganized in thought and incoherent. Ocular exam showed increased intracranial pressure, needed immediate neurosurgery

### Subdural Hematoma

Normal



Subdural Hematoma



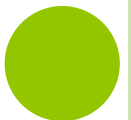
### 3. DENTAL EROSION OR BEHAVIORAL OUTBURSTS?

- 26 year old developmentally disabled patient admitted to psychiatric unit for severe behavioral problems, unresponsive to any pharmacotherapy. Found to have dental problems. Complete cessation of behavioral problems after dental work done.





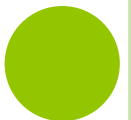
**Training in red flags and common symptoms helps aid in recognition of medical disorders that are mimicking psychiatric ones**



# WARNING SIGNS



- Sudden change in mood or personality
- History of head trauma
- Depression for the first time after age 55
- Recent travel or exposure to infections
- Any rash, swelling, drooping eyelid or facial tic
- Not responding to standard psychiatric therapy



# ADDITIONAL CLUES TO CONSIDER UNDERLYING MEDICAL CONDITION

If patient has:

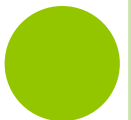


- Late onset of presentation
- Underlying medical problem
- No family history of psychiatric problem
- History of medication use
- Sudden onset of symptoms
- Abnormal vitals
- Abnormal labs



# ROLE AS MENTAL HEALTH PROVIDERS

- Do not request CT scan of brain for each person who seeks psychiatric help
- BUT ask about medical history (including family history, supplement use, etc.) in addition to emotional symptoms
- If you have any concerns, advise patients to have a physical with routine blood work





# WHEN TO REFER FOR ADDITIONAL WORK UP?

If patient has:

- Significant changes in weight, energy, appetite or sleep
- New visual or auditory hallucinations or alterations in smell, taste or tactile senses

Ask patient to go to his or her primary care doctor for routine lab work including vitamin levels and thyroid tests

**BETTER YET:** Contact PCP's office yourself and express concerns!



# MEDICAL OR PSYCHIATRIC?

