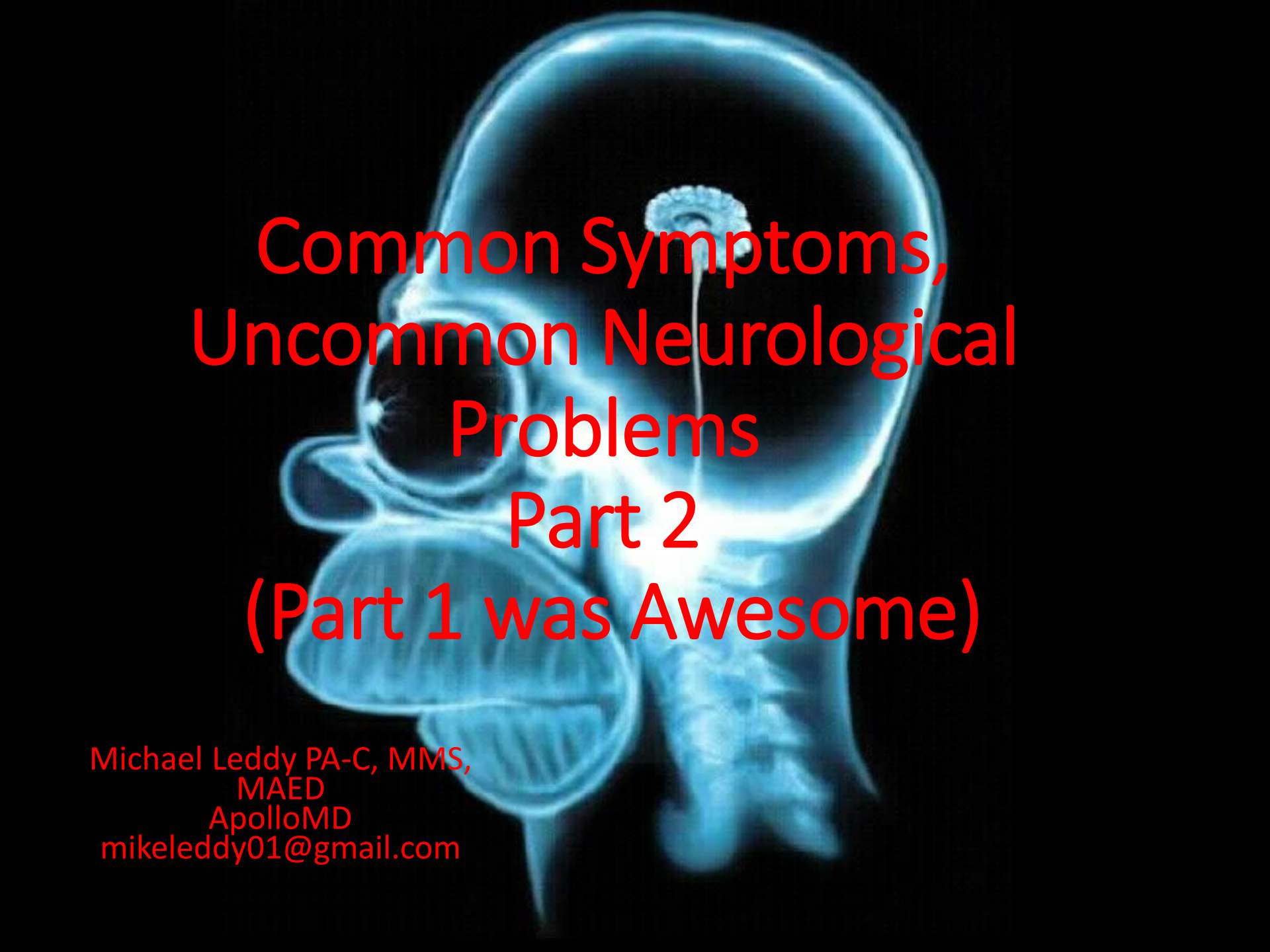

Common Symptoms, Uncommon Neurological Problems Part 2 (Part 1 was Awesome)

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Disclosure

- I have nothing to disclose

Objectives

At the conclusion of this session, participants should be able to:

- Recognize that often common symptoms are the result of uncommon problems
- Identify that key history points make the diagnosis
- Further explain the pathophysiology of uncommon neurologic disease

1. Automatisms of partial seizures can include:

A. Urinary incontinence

B. Tongue biting

C. Lip Smacking

D. Limb shaking

2. Work up for acute dementia should include:

A. CT Head
B. Urinalysis
C. Lumbar Puncture
D. There is no such thing as acute dementia

3. The hallmark symptom of restless leg syndrome is:

A. The uncontrollable urge to move while lying still
B. Nocturnal Leg Cramps
C. Myoclonic Jerks
D. Inability to fall asleep

4. A patient with high fever, altered mental status, and rigidity should be admitted to:

A. Med-surg
B. PCU/Intermediate
C. ICU
D. “I don’t know, please stop asking me questions”

5. A 40 year patient with new onset auditory and visual hallucinations with psychosis needs an urgent:

A. Psych evaluation
B. Dose of Haldol
C. Thyroid panel
D. EEG

6. A patient with change in affect/mentation, CSF with elevated protein, normal glucose, normal cell count should be treated with:

A. Rocephin
B. Ampicillin
C. Acyclovir
D. Compassion and kind words

7. A patient with a positional headache should undergo:

A. Lumbar puncture
B. Tilt table test
C. RPR testing
D. Epidural blood patch

8. Blocking of dopamine receptors leads to:

A. Bradykinesia
B. Muscle Rigidity
C. Rest tremor
D. Postural instability
E. All of the Above

9. A female patient with a diagnosis of limbic encephalitis should urgently undergo:

A. Pelvic Ultrasound
B. Beta HCG testing
C. Cerebral Angiography
D. MRI Lumbar spine

10. Diagnosing and treating a patient with a Neurologic problem can be:

A. Challenging and confusing
B. Frustrating and exhausting
C. Life changing (for patient) and rewarding (for clinician)
D. All of the above
E. None of the above


Actual Cases
History Only

“She is too nice”

86 yo c. female brought to the ED by her two daughters. Patient herself has no complaints. Daughters feel that she is “too nice” . Over the past three days, she has been responding to questions appropriately, but with briefer statements than usual. She is also much more pleasant than usual per her daughters, despite intentional attempts by them to agitate her. “She is a different person”. Pulling at her shirt buttons, frequent lip smacking, “like she has a dry mouth.” No slurred speech, identifies all objects correctly, follows all commands correctly. No weakness of sensory loss. No history of Dementia. No trouble walking, no tremor.

Past history of Peripheral vascular disease, Aortic dissection, Hypertension.

Complex Partial Seizures

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Past history of Peripheral vascular disease, Aortic dissection, Hypertension.

“We can’t care for him anymore”

78 yo aa male. Brought to ED by grandchildren, unable to provide his own history. Six months ago develops rapidly progressive short term memory loss. Family feels he does not recognize them, and has been lacking in hygiene. Urinating on himself much more than before, although he does have a history of urge incontinence. Family will not take him out anymore because he walks so slow, getting stuck in doorways and will not cross lines on the floor or transitions between levels and flooring materials. PCP diagnoses him with Parkinson's, and starts him on levodopa/carbidopa. This does nothing to help him and causes hallucinations. PCP increases dose and hallucinations become frightening.

Normal Pressure Hydrocephalus

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“I am having leg spasms at night”

45 yo male comes into office complaining of tightness in legs at night for the past 6 months. States they spasm but with further details is actually describing an aching sensation. Saw PCP diagnosed with restless legs syndrome and given a dopamine agonist titrated to high dose without improvement. Then sees a chiropractor, neck is adjusted and is sold a new “posture improvement pillow” . At night using this pillow he reports shocks going down back. Goes back to PCP still diagnosed with RLS since no symptoms during the day, given clonazepam and sent for a sleep study, which is normal. He then goes to watch a football game and after sitting 3 hours his arms start to ache and feel tight. Back to PCP told the RLS has progressed and is now called “restless limbs”.

Cervical Myelopathy

"I am having leg spasms at night"

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“I have a tremor”

58 yo male sent by urgent care for worsening tremor. Pt states has tremor of right hand that has been present for 6 months. Wife states he is walking slower, shuffling, increased falls, and “looks like a statue”. It is also taking him a lot longer to do simple tasks. Hx significant for Diabetes x 25 years with gastroparesis, meds are metformin, metoclopramide (Reglan), and benazepril

Drug Induced Parkinsonism

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“She Seems Depressed”

62 yo female brought to ED. Family states she is depressed has not eaten for 8 days and will no longer speak to them, has remained in bed, “normal” before this. Hx significant for pemphigoid treated with daily prednisone. Also two year use of citalopram for depression. Family also states she will not look at them, seems to roll away from examiner, flaccid limbs, lip smacking, incontinent, cries out, possible fever. Admitted to hospital with failure to thrive

Encephalitis with subclinical seizures

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“He keeps having seizures”

17 yo male basketball player who has three separate events where he has fallen to ground during a game and started convulsing, according to his mother. Has been to ED each time, and tells ED physician he feels lightheaded, abdominal cramping, blurred vision, “out of his body floating” before each spell. Events last approx. 1 min after which he is able to speak coherently with EMS and his coach. No chest pain, SOB, auras, h/o head injury, or abnormal birth history. ED MD dx is Generalized Tonic Clonic seizure and starts him on Valproic Acid

Convulsive Syncope

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“I am having BAD Headaches”

39 yo female states she has been having HA every day for three months. Throbbing, holocranial pain, without N/V, photo/phonophobia. No visual disturbances. They are worse with movement, specifically standing up and relieved when supine. Thinking this is Migraine PCP tries Sumatriptan, Topiramate without success. She goes to urgent care and is given Fioricet which does not work either. Pt has no prior hx of headache except one prior time similar to this after epidural for childbirth 9 years earlier. No fever, rash, neck stiffness, or trauma.

Intracranial Hypotension

"I am having BAD Headaches"

39 yo female states she has been having HA every day for three months. Throbbing, holocranial pain, without N/V, photo/phonophobia. No visual disturbances. They are worse with movement, specifically standing up and relieved when supine. Thinking this is Migraine PCP tries Sumatriptan, Topiramate without success. She goes to urgent care and is given Fioricet which does not work either. Pt has no prior hx of headache except one prior time similar to this after epidural for childbirth 9 years earlier. No fever, rash, neck stiffness, or trauma.

“Everyone thinks I am Crazy”

52 yo male presents with 15 years of progressive symptoms. States he started waking up in the middle of the night with abdominal cramping and urge to defecate. Then states he will feel numb all over for days at a time, resolved with massage. Has joint pain, kaleidoscope vision, and neck pain which were made worse after a MVA. Has seizures when anxious or stressed, twitching of eyes and face which improve if he drinks only decaf coffee. Has been to several academic medical centers and local clinics with dx of MS, Colitis, Lupus, PMR, RA, IBS, all with appropriate tx and no improvement

Not an organic neurologic disease

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“He is Crazy”

42 yo male with PMH of Gout and HTN is sent from PMD to ED after being brought in by family with acute intermittent visual and auditory hallucinations, as well as agitation. Continues to complain of the smell of burning rubber. No illicit drug hx, extensive work up negative. While in ED hallucinations become so profound patients starts screaming. He is given Ativan. Dx: Psychotic break. Telepsych consult obtained, told to be given Depakote for mood control and Ativan every two hours prn. Improves, discharged three days later.

Complex Partial Seizures

"He is Crazy"

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“Fever of Unknown Origin”

64 yo male with PMH of DM, HTN, Schizophrenia, CAD, in the ICU with persistent fever above 99.0 for 4 days. Also is tachycardic, labile BP, diaphoretic, “stiff all over”, confused, hallucinating, (prompting use of Haldol) intermittent myoclonic jerks of limbs, leukocytosis. CXR, UA, Blood cx, CSF all normal. Initially diagnosed with sepsis, but no source found. Elevated CPK, treated appropriately for Rhabdomyolysis, without improvement.

Neuroleptic Malignant Syndrome

"Fever of Unknown Origin"

64 yo male with PMH of DM, HTN, Schizophrenia, CAD, in the ICU with persistent fever above 99.0 for 4 days. Also is tachycardic, labile BP, diaphoretic, "stiff all over", confused, hallucinating, (prompting use of Haldol) intermittent myoclonic jerks of limbs, leukocytosis. CXR, UA, Blood cx, CSF all normal. Initially diagnosed with sepsis, but no source found. Elevated CPK, treated appropriately for Rhabdomyolysis, without improvement.

“He can’t eat”

28 yo male cafeteria worker with no PMH develops bilateral facial weakness, trouble swallowing, double vision over three days. Goes to ED initially told he has bells palsy. Asks for a second opinion (after consulting WEB MD using smartphone). Then evaluated by GI, told due to “Anxiety”. Then told he had a brainstem stroke and was considered for TPA. MRI brain normal. Sent home from ED with Dx of ALS and given number for neuromuscular clinic with 3 month waiting list and a local ALS support group. 3 days later develops bilateral upper then lower limb weakness, trouble breathing, constipation and urinary retention.

Botulism

“He can’t eat”

28 yo male cafeteria worker with no PMH develops bilateral facial weakness, trouble swallowing, double vision over three days. Goes to ED initially told he has bells palsy. Asks for a second opinion (after consulting WEB MD using smartphone). Then evaluated by GI, told due to “Anxiety”. Then told he had a brainstem stroke and was considered for TPA. MRI brain normal. Sent home from ED with Dx of ALS and given number for neuromuscular clinic with 3 month waiting list and a local ALS support group. 3 days later develops bilateral upper then lower limb weakness, trouble breathing, constipation and urinary retention.

“She has Pseudo seizures”

20 year old college student comes in for 3rd presentation to ED. Roommate brings her in each time due to short term memory loss, episodic confusion, uncontrolled crying episodes, and seizure activity, all rapidly progressive over 2-3 weeks, and getting worse. Patient is failing all of her classes which is highly unusual for her. The patient herself is unaware this is happening, denies all events. Past medical history significant for anxiety, left ovarian cyst, marijuana use.

At first visit extensive workup done to include CBC, CMP, UDS,CT head. All normal. Patient discharged with Dx Pseudo seizures. Second and third ED visit, both with basic normal workup, and discharged with same dx to follow up with student health.

Comes back later that night to ED intubated and actively seizing.

Limbic Encephalitis

"She has Pseudo seizures"

20 year old college student comes in for 3rd presentation to ED. Roommate brings her in each time due to short term memory loss, episodic confusion, uncontrolled crying episodes, and seizure activity, all rapidly progressive over 2-3 weeks, and getting worse. Patient is failing all of her classes which is highly unusual for her. The patient herself is unaware this is happening, denies all events. Past medical history significant for anxiety, left ovarian cyst, marijuana use.

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Comes back later that night to ED intubated and actively seizing.

Conclusion

- Zebras do exist and in Neurology, they are often very serious problems
- Patients have a limited variation of how they can describe symptoms
- History is everything, Physical Exam only confirms what you already know

1. Automatisms of partial seizures can include:

A. Urinary incontinence

B. Tongue biting

C. Lip Smacking

D. Limb shaking

Rationale- Partial seizures often have automatisms, lip smacking, pulling at clothes

2. Work up for acute dementia should include:

A. CT Head
B. Urinalysis
C. Lumbar Puncture
D. There is no such thing as acute dementia

Rationale-Dementia is a progressive disease. Delirium can be result of underlying illness but it is not Dementia

3. The hallmark symptom of restless leg syndrome is:

A. The uncontrollable urge to move while lying still
B. Nocturnal Leg Cramps
C. Myoclonic Jerks
D. Inability to fall asleep

Rationale- RLS though to be due to dopamine imbalance

4. A patient with high fever, altered mental status, and rigidity should be admitted to:

A. Med-surg
B. PCU/Intermediate
C. ICU
D. “I don’t know, please stop asking me questions”

Rationale- NMS patients often need intubation, cooling blanket, fluids, close monitoring

5. A 40 year patient with new onset auditory and visual hallucinations with psychosis needs an urgent:

A. Psych evaluation
B. Dose of Haldol
C. Thyroid panel
D. EEG

Rationale- It is highly unusual for first psychotic break to occur at this age. Hallucinations from complex partial seizure occur at any age

6. A patient with change in affect/mentation, CSF with elevated protein, normal glucose, normal cell count should be treated with:

A. Rocephin
B. Ampicillin
C. Acyclovir
D. Compassion and kind words

Rationale- CSF consistent with viral not bacterial cause. Likely HSV encephalitis

7. A patient with a positional headache should undergo:

A. Lumbar puncture
B. Tilt table test
C. RPR testing
D. Epidural blood patch

Rationale- Positional character suggests dura leak requiring blood patch to correct

8. Blocking of dopamine receptors leads to:

A. Bradykinesia
B. Muscle Rigidity
C. Rest tremor
D. Postural instability
E. All of the Above

Rationale- blocking of dopamine receptors or not enough dopamine available leads to Parkinson's symptoms

9. A female patient with a diagnosis of limbic encephalitis should urgently undergo:

A. Pelvic Ultrasound
B. Beta HCG testing
C. Cerebral Angiography
D. MRI Lumbar spine

Rationale- Limbic encephalitis is thought to be a paraneoplastic cause with ovarian teratoma in women likely cause. Testicular cancer in men

10. Diagnosing and treating a patient with a Neurologic problem can be:

A. Challenging and confusing
B. Frustrating and exhausting
C. Life changing (for patient) and rewarding (for clinician)
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Thank You!

- I will stay after the session for questions or email me at:
- Mikeleddy01@gmail.com

References

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