CIRS Case Week 3 Further Findings

Results

VCS +. 11 clusters
11-3-52B, 7-2-53
MSH 14.
ACTH 14, cortisol 9.2
ADH 1.4, osmolality 293
MMP9 456
C4a 8349
C3a 173
TGF beta-1: 13274
VEGF < 31
AGA neg IgA, borderline IgG
ACLA IgM +
ANA neg
VO2 max 21 ml/kg/min
Echo EF 55%%, TR 3.7 RV wall thickened
NQ: FP enlarged; CG atrophied; SLV 1.25; hippo 0.23; amygdala 0.92; caudate 0.20; putamen 0.37; pallidum 0.048; thalamus (L) 0.49 and (R) 0.48

GENIE +MHM; +IRS2; -apop, - RIPK1; coag + 8/10; Lyme - untreated; - treated; + mismatch Ikaros/VIPR1; defensins -; + upreg CIRS genes; + T cell synapse abnormality; + PTSD; + HDC; +Tub A4A and Tubb1; + actinos; _endos; - mycotoxins

Questions

1. Does this patient meet criteria for CIRS?
2. Why is his TGFB1 so high?
3. Describe his cardiopulmonary findings. Are they normal?
4. Is he at risk for vascular dementia? How do you know?
5. Does he have Mast Cell Activation? Why not? What does GENIE tell us about his histamine production?
6. What is the biotoxin he is reacting to?

CIRS Case Report

History and Physical

CC: 58-year-old white male presents for initial consultation regarding abrupt onset of gastrointestinal illness on cruise to the Caribbean. He was in normal state of compromised health before embarking, with long-standing fatigue, shortness of breath, cough, joint abnormalities and cognitive dysfunction. He had abrupt onset of a group of symptoms two weeks ago, with nausea, retching of bile-stained vomitus, watery diarrhea, cough and itching lasting two days. He had worsening of shortness of breath, with tachycardia and severe headache since. He felt like he was lost while in his cabin. Patient was one of many cruisers sickened on the boat, with Norwalk agent suspected. No testing was done by the cruise line.

HPI: Patient has retired from government employment as a CPA, on disability due to difficulty handling numbers and performing up to pay grade. He is living on savings, long term disability award and a pension. Patient is accompanied by his wife who provides the bulk of the history. Patient was last well approximately 6 years ago when he was working in the Medicare/Medicaid office outside Washington, DC. His job involved processing claims for physicians and chiropractors exceeding one million dollars per day. He always received sterling job evaluations, working long hours and rarely taking vacation, but his cognitive decline created financial disasters for providers.

He worked for 20 years in a small cubicle in a large room with approximately 600 other staffers with similar size cubicles. Because of his improved job performance, he was promoted to an enclosed office shortly before the onset of the disabling illness. Patient denies any water intrusion into his home or his office which itself is part of a recirculated air handling system, separate from the rest of the building. He notes there was a history of complaints of overflowing toilets in the women's bathroom directly adjacent to a shared wall of his office. He never saw any water. He did notice subsequently black dirt around the air return as well as the air supply vents into the room.

Patient blamed his fatigue on excessive work but was not any better with rest or his rare vacation. He later developed a slightly productive cough, worse in the morning, that he felt was due to allergies even though the cough became year-round. Six years before presentation to his then attending, he had worsening shortness of breath. In the past he routinely would climb three flights of stairs with a heavy brief case everyday to get to his cubicle. His dyspnea increased to the point that he had to take the elevator and stop bringing his brief case to work. He noted shortness of breath walking less than a block on a level surface. He moved his bedroom from the second floor to the first floor because of fatigue and the stairs are too much of a problem for him. He has had evaluation from pulmonology showing restrictive lung disease for which he was told he had asthma. He never had obstructive disease; no diffusion capacity was done. Chest x-ray was normal. His cognitive issues began with difficulty handling numbers but progressed to trouble with recent memory, difficulty with concentration and disorientation. After he was unable to drive home from work on several occasions, his wife wrote out directions for him to

get home; he carried them with him in his car. He obtained psychiatric evaluation and was told he was developing Alzheimer's disease. No spinal tap was done; no MRI was done. The antioxidant vitamins he took didn't help.

Additional medical problems include significant cramping of his calf muscles if he extended his ankles at night. He has also noticed significant pain in the distribution of the sartorius muscle on the right side made worse by crossing his leg to tie his shoes. He noted excessive thirst, frequent urination which he blamed on prostate trouble. He also had frequent episodes of increased susceptibility to static shocks. He says he has amused himself by touching a doorknob in the dark to see if he had a blue electrical discharge or a yellow one. He has seen approximately 50 physicians and has spent over $150,000 out of pocket in six years, not counting what his health insurance paid seeking answers for his multi-system, multisystem illness.

Patient used to be an avid birder with frequent sojourns into parks along the Chesapeake Bay area. He had multiple tick bites and occasionally had rashes including red areas as large as a quarter. Lyme testing was normal, but he was treated for an infection with months of antibiotics, including IV doxycycline, ceftriaxone, as well as Mepron and Dapsone.

Diagnoses of multiple sclerosis, chronic fatigue syndrome, fibromyalgia, depression, malingering and combined variable immune deficiency have been entertained. He sought alternative health providers and he was diagnosed with mast cell activation syndrome, androgen imbalance, leaky gut, SIBO and given neural retraining. Treatments have included curcumin, glutathione, ozone, hormonal manipulations and pounds of unknown but very expensive supplements he purchased from his providers.

Social history: He never smoked cigarettes or vape products. He drinks beer nearly every day after work and an occasional glass of wine but no stronger alcohol drinks and used no illegal drugs. Patient has been happily married for 30 years. Although he and his wife have no children, they had a full and active life together until his disability intervened. He enjoys outdoor sports and remains ecstatic after watching the Nationals win the World Series in 2019.

Three years ago, he won a trip to a high-rise vacation condo overlooking Lake Apopka, Florida. He watched the shorebirds every day but felt worse when the wind blew on his face.

PMH: benign. No unusual childhood diseases. He was told that he had prediabetes 20 years ago with that diagnosis disappearing when he lost 25 pounds. No medical illness other than history of present illness. No surgeries or transfusions. No allergies.

Current medications include itraconazole oral and sublingual drops, glutathione IV and per rectum, curcumin, charcoal, clay, vitamin C, D, E, K, switzel (honey mixed with apple cider vinegar) and nattokinase.

Review of systems: patients feels unwell on a daily basis. He admits to fatigue, feeling weak manifested by difficulty arising from a chair after sitting. He notes low back pain and stiffness with gelling. He has occasional headaches that are worse in the morning possibly related to clenching his teeth. He occasionally has red eyes and blurred vision. He has no problems with

taste, smell or swallowing. He has a chronic cough and shortness of breath on level surfaces. He does not exercise regularly or take walks looking for birds any longer.

He has shortness of breath as mentioned but he also has dyspnea lifting objects up to 15 pounds. He would still try to lift more than 15 pounds. He denies exertion related chest pain, palpitations or abnormal force of heartbeat. He has felt chest pain on several occasions and has passed out once for which he was evaluated in the emergency room with no diagnosis and no tests.

Abdominal patient has water brash every morning, worse after fatty meals. No response to stomach acid remedies. Patient has frequent urination with nocturia times three; he has not attempted any intimate activity with his wife. He notes soreness and swelling of the lower extremities, right greater than left at the end of the day. He denies any discoloration of extremities although his wife says his feet look plethoric. She relates patient has decreased range of motion of his right shoulder greater than left with reduction of fine motor control of his fingers in his right hand, normal on the left. He notes he has discomfort in his low back that is actually been improved because of his shortness of breath that prevents him from walking a full block needed to have low back and numbness in the lower extremities. He has no ongoing complaints of numbness, tingling, vertigo or ongoing discomfort in his legs except for the cramping at nighttime.

Physical exam: height is 6 feet, weight 185. He has some atrophy in his lower extremities. At rest, holding both outstretched hands show tremor, without tremor of head; demonstrated simply by placing a single sheet of paper on outstretched fingers. Head, eyes, ears, nose and throat are benign. Normal carotid upstroke, no thyromegaly and no JVD. Chest shows decreased excursion of the diaphragm but no evidence of intercostal atrophy. Lungs are clear but after cough there is mucus produced; post-tussic rales can be heard at both bases. S1 and S2 are normal with questionable increased intensity with pulmonic valve closure in S1. An S3 is present but this finding was intermittent. Patient has Cheyne-Stokes respirations at the bedside. He has no clicks, murmurs. There is suggestion of a right sided lift. Abdomen is benign, no AAA, no increased liver, spleen or kidneys. He does have a mild ventral hernia. Extremities show 2+ pitting edema on the right and 1+ on the left. Homan's sign is ambiguous on both sides. Skin of the feet is dry, scaly but is not plethoric.

Impression: acute gastrointestinal illness superimposed on pre-existing multisystem, multi-system illness with diffusely positive review of systems.

Plan: screening laboratory studies will be done. Check Norwalk titers. Follow up as indicated. Consider psych eval for PTSD.

CBC nl. CMP nl with NA 142, K 3.9, CO2 21, CL 98, BUN 24, glucose 97.

Questions:

What is missing in work-up? Is this Norwalk? CFS? MS? CVID? Is this CIRS? From what? What about Lyme? Do we diagnose Babesia from ELISA? What do Sarcocystis and Eimeria do

to antibody testing for Babesia? What are haptoglobins? What is important about thick RBC films? Why is Lake Apopka important here? What # of grey matter nuclei do we expect to be atrophic on NQ? Cortical grey? Do we have molecular hypometabolism? What tests do you get from environmental lab? Who should pay for the medical malpractice? What protocol showed prospective acquisition of illness?

This is an actual case, settled out of court. Don't ask for malpractice suits!

Parkinson's Syndrome Case Presentation

Symptom list.

Tremor
Tremulousness
Asymmetric loss of use of upper extremity

Slow handwriting
Micrographia
Decreased fine motor work
Increased time to take off/put on shoes and socks

Falls or unsteadiness
Trauma
Double vision
Abnormal speech
Dysphasia
Dysphonia
Aspiration

Problem List:
Hypothyroid
Acquired von Willebrand's Syndrome
Bilateral DVT
PE
Shortness of breath
Right lower extremity swelling
History of pulmonary hypertension
Polymyalgia rheumatica

Past Surgical History:
Insertion of screws in the right ankle
Appendix
Reconstructive surgery of the right hand
Multiple nasal sinus surgeries for refractory hemorrhage

Social History:
Widower
One child

Tobacco, none

Alcohol, yes. Not to excess
Heterosexual

Review of symptoms:
Fatigue
History of night sweats
History of weight gained followed by weight loss followed by weight gain followed by weight loss, voice change. No upper airway symptoms and no trouble swallowing.
Visual: continued nasal nasolacrimal duct obstruction

Cardiovascular
Catheterization times two for shortness of breath, confirmed pulmonary hypertension. Resolution with VIP.

GI
None

Endocrine
No, other than Hashimoto's thyroiditis treated for 50-years

G/U
painless hematuria present recently.

Musculoskeletal PMR, STEROID DEPENDENT, since 2/2021
Marked problem with gait

History of low back pain and rotator cuff discomfort with polymyalgia rheumatica.

Skin
Recent easy bruising and easy bleeding. Secondary use of prednisone combined with Xarelto.

Neurologic
Tremors; weakness, no seizures, no syncope, no light headiness except for occasion.
No headache, no memory loss, no falling in the past years despite unsteadiness.
No ongoing psychiatric conditions.

Exam
Head, face, hypomimia of expression; Parkinsonian facies. Slow blink rate.
Regular pulse, occasional ectopy.
Blood pressure 120/72.
Higher cortical function testing: there is no apraxia; there is no agnosia, there is presence of cortical release phenomenon such as glabellar, snout, palmar mental responses.

Cranial nerves
Saccades are a bit ratchety
No paresis
No intranuclear ophthalmoplegia, volitional down gauge. Nothing to suggest PSP.

Phonation is a husky dysphonia
Muscle tone is cogwheeling, right greater than left and worsens with reinforcement

Tendon reflexes are 2/4 and symmetric
Gait is Parkinsonian, turns taking too many steps but not really en bloc

Decrease right arm swing is obvious
Fine motor control, rapid
Finger decays significantly the right upper extremity, much better preserved on the left.
Dramatic micrographia
No dysmetria
No abnormality in sensation

Resting tremor, 3/6 right upper extremity, worse when distracted and appears more obvious with reinforcement when the opposite hand is initiated.
Decreased right arm swing is also noted.