My Evolving Understanding and Approach To The Treatment of Covid Spike Protein Induced Disease

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Diagnosis of Post-Covid, Post-Vaccination Syndromes

"A constellation of symptoms that begin in temporal association with either COVID mRNA vaccination or acute Covid infection"

Temporal Association With Vaccination

20%? – minutes to hours from injection

75%?– within days to weeks (generally within 6 weeks)

5%? – multiple months later

Temporal Association with Acute COVID

Majority recover fully from acute illness then weeks later symptoms emerge

Minority progress directly from acute COVID into "long-haul" symptoms

Diagnosis of Post-Covid, Post-Vaccination Syndromes

- There are 3 “core symptoms” which I see in almost everyone:
- **Fatigue**, **Post-exertional malaise**, **Brain fog**
- Then there are a “side menu” of symptoms, most common in my experience is:
  - Dysautonomia - POTS, temperature dysregulation, shortness of breath “at rest” – unsatisfying breath
  - Small Fiber Neuropathy: Burning, Numbness, Tingling, Cold or pain sensations in extremities, Weakness in extremities not revealed with most standard imaging and diagnostic tests)
  - Neuroinflammation:
    - Motor Symptoms: Fasciculations/ Uncontrolled Movements, awake convulsions/seizures – ALS like syndromes, Huntington type syndromes
    - Cranial Symptoms - Headaches – any type, Insomnia, Tinnitus, Vertigo, Dizziness, vision loss, hearing loss, loss of taste/smell
    - Cognitive symptoms – brain fog as above – short term memory, deficits in focus/concentration/processing/orientation
- The myriad symptoms overlap with those attributed to MCAS, ME/CFS

More Symptoms

- Gastrointestinal – loss of motility, food intolerance, reflux, weight gain, weight loss
- Psychiatric - Anxiety and Depression
- Night sweats/hot flashes
- Skin rashes, skin sensitivity, nails falling off, doscolored
- Menstrual changes – menorraggia, amenorrhea, dysmenorrhea, ramping up of all symtpoms around menstruation
- Urinary issues (frequency, retention)
- Muscle atrophy

Pathogenesis – “Spike-opathy”

Spike protein is one of the most toxic proteins in history

Multiple intersecting and overlapping pathophysiologic processes

S1 protein induced persistent inflammatory response – macrophage activation

The production of myriad autoantibodies

Complement Mediated Vasculitis

Activation of the clotting cascade – microclotting (+platelet aggregation)

Secondary viral reactivation due to Vaccine Induced Immunosuppression

Mast Cell Activation syndrome, new/worsened allergies

Mitochondrial dysfunction

Dysfunctional Nitric Oxide Pathways

Pathogenesis Continued

Due to altered immune function, the **activation of dormant viruses** may occur, resulting in reactivated Herpes Simplex, Herpes Zoster, EBV, and CMV infection.

Mast Cell Activation Syndrome appears to be also triggered in some patients

- mast cells release a variety of vasoactive mediators, such as tryptase and histamine - mediate allergies and allergic reactions
- **All**ergic Syndromes – multiple patients found with high IgE, asthma, new onset allergies

Nitric Oxide pathways – altered vasodilation/vasoconstriction

Baseline Laboratory Testing – results rarely actionable

CBC with differential and platelet count.	Standard blood chemistries including liver function tests	D-Dimer (as a marker of clotting activation).	CRP as a marker of ongoing inflammation. A comprehensive extensive cytokine/chemokine panel is unnecessary and very costly the results of which will not change the treatment approach.
Early morning cortisol (some patients develop autoimmune adrenal failure)	TSH to exclude thyroid disease	HbA1C. Vaccine inured patients are at an increased risk of developing diabetes	Troponin and BNP to exclude cardiac disease
CMV and EBV, HSV serology to exclude viral reactivation	Vitamin D level	Limited screening autoantibodies.	***Live Blood Analysis**

Challenges in Developing a Treatment Approach

- Background/Training – Allopathic vs. naturopathic vs. osteopathic vs. functional/integrative vs regenerative
- Practice style evolution and adaptation to complex, chronic illness
  - I am learning about a whole host of therapeutic approaches and conceptual understandings of chronic disease.. that they don't teach you in medical school (i.e. zeta potential, cell danger response,etc
  - ****A must read is the three last posts from "A Midwestern Doctor" on the cell danger response on the Substack called The Forgotten Side of Medicine**
  - There is no "straight-forward FLCCC approach" – my approach is unique and separate from the FLCCC
  - driven by personal experience/comfort and avoidance of long med lists/large pill burdens
- New, potentially effective therapies proposed… on a daily basis
  - Difficult to integrate new approaches while developing comfort with existing approaches
  - To learn optimally from current practice, need better and more careful data collection and analysis
- Patient finances/insurance – barriers to HBOT, infrared, ozone, stem cells, exosomes
- Patient location – rural vs. urban – limited access to HBOT, IVIG, ozone, UVBI centers
- Patient's treatment history – some favored treatments may have already been tried and failed or not tolerated
- Patient preferences – medication sensitivity, medication reluctance

Our Treatment Approach

- Must be individualized – not all patients respond to the same treatment
- **"Sequential Trials of Therapy"** - Start with a standard, often effective trial of therapy, and depending on response, move to 2nd and 3rd line therapies
  - Even with core protocol, sequential additions of components reasonable, to serve as a "control" for each element – how long to wait before next trial depends on the medication being trialed – some medicines induce rapid responses, others can take days to weeks to have an effect
- **Patients should serve as their own controls**, response to treatment dictates the modifications of the plan
  - Must identify whether each component brings about a response
    - Easy to "get lost" and end up with along medication list/high pill burden

START WITH THE BASICS

Pacing/Activity Modulation

- Patients are not ready for exertion/exercise
- When they over do it, they "pay for it" (sets them back IMO)
- "Spoon Method" of moderating activities

Rest/Sleep – Challenging, I like melatonin, combo short/long acting, meditation, sleep hygiene counseling (regular bed/awake times, avoiding stimulation at night, especially screens

Diet – avoid processed foods, food should look like food etc. Elimination diet approaches, ketogenic diets, low histamine diets

My First Line Treatment Trial

- **Ivermectin**
  - Numerous anti-inflammatory, cytokine blocking mechanisms, repolarizes monocytes/macrophages, tightly binds to spike protein
  - Highest incidence of positive response (70-90% of patients) – myriad symptoms can respond – fatigue, brain fog, neuropathic symptoms, taste/smell/tinnitus
  - I start with 0.3mg/kg daily. If response within days, do a trial of double dose
  - Clinical responses seen as early as 1 day up to ten days in general
    - In some cases, patients unable to identify improvement initially but "discover" its efficacy when discontinued
  - Duration of therapy in responders – indefinite (I have less than a handful of patients who have "graduated" off all medicines to date)
  - Dose Response – at first follow-up, I am now "doubling the dose" (0.6mg/kg) for a ten-day period to assess for additional improvement (seen in 40%?)
    - If stronger response seen, I continue at a dose of 0.5-0.6mg/kg