

MCAS, POTS, Dysautonomia, and “Genetic Disorders” — Long COVID Observations

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With 27 years of experience working with health clients—specializing in chronic illness and autoimmune disorders—this practice has developed a strong foundation in pattern recognition and research. New health trends have emerged that were not observed prior to 2020, including conditions affecting both those who received COVID vaccines and those who did not but contracted one of the COVID variant infections, resulting in Long COVID.

In March of 2020, about the time SARS CoV-2 (COVID-19) came into our awareness, a lot of things happened that were unusual for a viral infection epidemic – loss or distortion of taste and smell, hair loss, chronic cough (that lingered for months and years), chronic congestion, body aches and joint pain, fatigue, brain fog, depression, anxiety, tinnitus, skin rashes, blurry vision, and just feeling very sick for a long time after infection or after getting the vaccines, especially Pfizer and Moderna. The COVID vaccines were introduced in about 2021, and within a year, this practice observed a noticeable uptick in chronic, severe, and debilitating health conditions.

These chronic conditions include POTS (Postural Orthostatic Tachycardia Syndrome), Mast Cell Activation Syndrome, Dysautonomia, and rare “genetic disorders”.

There has been an increase in heart and cardiovascular conditions, including aneurysms, heart attacks, strokes, embolisms, myocarditis, thrombosis, etc., and cancers of all types, including rare cancers. Some oncologists (e.g., in a 2024 Washington Post report) described seeing more unusual, aggressive, or late-stage cancers post-pandemic. Case reports have noted temporal associations (cancers appearing or progressing shortly after infection or vaccination) with certain lymphomas and leukemias, glioblastoma, sarcomas, virus-associated cancers like Kaposi sarcoma or Merkel cell carcinoma, and pancreatic, breast, and lung cancers with aggressive behavior.

Multiple cancers appearing simultaneously and cancers in younger patients or with unusually rapid progression have also been noticed. It is possible that the increase in cancers has to do with delayed cancer screenings, delayed diagnoses, immune stress from severe infection, and population aging. There were legitimate delays in healthcare, especially in the first few years of the pandemic.

Several autoimmune and immune-mediated conditions have shown increased diagnoses or new-onset cases since 2020, largely associated with SARS-CoV-2 (COVID-19) infection rather than vaccines. Large cohort studies (2023–2025) consistently report a 20–50% higher risk of new autoimmune diseases in the months to years following COVID-19, with risks highest after severe infection, the Delta variant, or in unvaccinated individuals.

Autoimmune conditions, like Hashimoto’s and some less common ones like LADA (Latent Autoimmune Diabetes in Adults), Ankylosing spondylitis, vasculitis, Alopecia areata, and immune thrombocytopenia (ITP).

Approximately 35% of health clients with spike protein levels over 2000 have been observed to have EBV activated or reactivated (early antigen).

Nervous system disorders like Bell’s Palsy and Parkinson’s, neuropathies and neuralgias, tremors and

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tics, and seizures.

A notable uptick in serious and rare conditions has been seen since 2021. Patients dealing with long COVID or vaccine damage are scared, desperate, and declining, and many feel hopeless.

A striking uptick in POTS has been observed in young people in their 20s to early 40s, even though it can start at any age. Their initial complaints are something like, "I can't walk for very long, I feel bad and have to sit down in the grocery store, I can't stand for very long, it's worse when I'm hot." If they have a wearable device, they notice their pulse and heart rate are changing very quickly from doing very little. One patient — a family member — experienced a 50-point jump in heart rate while watching a TV show, following 2 Pfizer vaccines, and was subsequently diagnosed with both Melanoma and POTS after approximately 10 doctor visits. Both diagnoses followed the vaccines, though this is an observation, and causation cannot be established.

If a patient is sitting in a cool waiting room for a while and then does the slant board test for POTS, they might test negatively. They should be tested after standing for a while and after exposure to heat for a proper test. Most primary care physicians won't make this connection at all. Electrolytes and water are important for people with POTS symptoms, as well as testing for spike protein and treating it. (Ivermectin, Mebendazole, Turmeric, Nattovena, Bromelain, and Augmented NAC). Treatment recommendations are tailored based on the level of spike protein antibodies.

Dysautonomia is an umbrella term for a group of disorders that involve malfunction of the autonomic nervous system (ANS). The ANS is the part of the nervous system that automatically controls involuntary body functions you don't consciously think about, such as heart rate, blood pressure, digestion, sweating, temperature regulation, breathing, pupil dilation, bladder control, and more.

It is not a single disease but a broad category of autonomic dysfunction or autonomic neuropathy. It can range from mild and temporary to severe and chronic. There are at least 15 distinct types, with the most common including:

- Postural Orthostatic Tachycardia Syndrome (POTS)
- Orthostatic hypotension
- Neurocardiogenic (vasovagal) syncope
- Inappropriate sinus tachycardia

POTS is a nervous system disorder that disrupts the body's ability to maintain homeostasis (internal bal-

ance). It is not contagious and is often underdiagnosed because its symptoms can overlap with those of many other conditions. Possible symptoms vary widely depending on the specific type, severity, and which parts of the ANS are affected. Not everyone experiences all (or even most) of them, and they can come and go or worsen with triggers like standing, heat, and stress.

Common symptoms include:

- Cardiovascular/Orthostatic symptoms (often the hallmark):
 - ◆ Lightheadedness, dizziness, or fainting (syncope) when standing up
 - ◆ Rapid heart rate (tachycardia) or palpitations, especially upon standing
 - ◆ Abnormal blood pressure fluctuations (too high or too low)
 - ◆ Chest pain or discomfort
- General/Neurological:
 - ◆ Extreme fatigue or exercise intolerance
 - ◆ Brain fog, forgetfulness, trouble concentrating
 - ◆ Headaches or migraines
 - ◆ Tremors or shaking
 - ◆ Anxiety or mood changes
- Gastrointestinal:
 - ◆ Nausea, vomiting
 - ◆ Constipation, diarrhea, or bloating
 - ◆ Abdominal pain
 - ◆ Difficulty swallowing
- Temperature and sweating regulation:
 - ◆ Excessive sweating or inability to sweat
 - ◆ Heat or cold intolerance
 - ◆ Flushing or feeling too hot/cold
- Blurred vision or light sensitivity
- Dry mouth or dry eyes
- Urinary issues (incontinence, retention, or frequent urination)
- Shortness of breath
- Sleep disturbances
- Sexual dysfunction
- "Coat hanger" pain (neck/shoulder pain from poor blood flow)

In severe cases, it can lead to malnutrition, falls, or life-threatening complications (especially in certain rare forms). There is strong evidence linking SARS-CoV-2 infection (the virus that causes COVID-19) to new-onset or worsened dysautonomia, particularly POTS and other forms of autonomic dysfunction in "long COVID" (post-acute sequelae of SARS-CoV-2).

Dysautonomia can appear during acute infection,

shortly after, or months later. It affects an estimated ~2.5% of people who had COVID-19 overall, and up to 25–30% (or higher in some studies) of those with long COVID or who were hospitalized.

Possible mechanisms: Direct viral invasion of ANS centers in the brain/brainstem, persistent inflammation, endothelial (blood vessel) damage, hypoxia (low oxygen), or autoimmune responses (molecular mimicry where the immune system attacks ANS tissues).

Many patients report POTS-like symptoms (rapid heart rate on standing, fatigue, dizziness) as a key part of long COVID—possible Relation to SARS-CoV-2 (COVID-19) Vaccines. There is a weaker but reported association between COVID-19 vaccines and new-onset dysautonomia (especially POTS), though it is much rarer than after natural infection.

Large studies show a small increase in POTS-related diagnoses in the weeks/months after vaccination (e.g., odds ~10–33% higher post-vaccine in some analyses compared to pre-vaccine baseline). However, the risk is significantly lower than after actual SARS-CoV-2 infection (infection carries ~2–5 times higher risk of POTS/dysautonomia in head-to-head comparisons).

Most cases occur in people who already have predisposing factors (e.g., autoimmune tendencies, prior mild dysautonomia, or other health issues). To make the point again, how many times did we hear dysautonomia discussions or related diagnoses before 2020???

In tracking spike protein antibodies across patients, variables recorded included blood type, MTHFR genetic mutations, age, number of vaccines and PCR tests, and confirmed COVID infections. There weren't enough genetic mutation tests (MTHFR, MTRR, COMT, MTR, AHCY) to see any pattern. No discernible trend related to blood type was identified either. Having followed blood type associations for over 35 years, the expectation was that blood type A individuals might be less resilient, but the data did not support this (perhaps the sample size of 100 was insufficient??). There were also a few anomalies where a few people who did not get vaccines or PCR tests had spike protein antibodies in the thousands, and 2 people had very high numbers over 25,000. And then there were just a few who had at least 2 mRNA vaccines, and they had very low spike protein antibody levels, under 100.

Except for these outliers, the data showed a pattern: higher levels of spike protein antibodies correlated

with more serious and chronic health conditions.

Prior to 2023, approximately one POTS case per year was seen in this practice. That number has risen to approximately one per week. Prior to 2020, Mast Cell Activation Syndrome was rarely encountered; it is now heard of at least monthly. Patients are listing “MCAS” on their intake forms as though it is a common acronym. With a specialty in autoimmune conditions, it is notable that autoimmune presentations previously unencountered are now being seen regularly.

Mast cell activation syndrome (MCAS) is a condition in which mast cells—a type of white blood cell involved in immune responses and allergic reactions—become inappropriately activated and release excessive amounts of chemical mediators (such as histamine, prostaglandins, leukotrienes, and tryptase) without a clear or proportional trigger. This leads to recurrent, episodic symptoms that can affect multiple organ systems and mimic severe allergic reactions or anaphylaxis.

Common MCAS Symptoms occur in episodes (flares) and typically involve at least two organ systems. They may include:

- Skin: Flushing, itching, hives (urticaria), swelling (angioedema).
- Gastrointestinal: Abdominal pain, nausea, vomiting, diarrhea, or cramping.
- Cardiovascular: Low blood pressure, rapid heartbeat (tachycardia), dizziness, or fainting.
- Respiratory: Shortness of breath, wheezing, nasal congestion.
- Other: Headaches, brain fog, fatigue, or, in severe cases, life-threatening anaphylaxis-like reactions.

Triggers can vary widely and may include stress, temperature changes, certain foods, medications, infections, or no obvious trigger at all. Symptoms are often unpredictable and can range from mild to severe.

Clinical: Recurrent, severe episodes of typical mast cell activation symptoms involving at least two organ systems (e.g., skin + GI, or skin + cardiovascular).

Laboratory: Objective evidence of mast cell mediator release during an episode, such as a significant rise in serum tryptase (usually $\geq 20\%$ above the patient's baseline level + 2 ng/mL) or elevations in other markers like urinary N-methylhistamine or 11β -prostaglandin F₂ α .

Other conditions must be ruled out, as symptoms

can overlap with allergies, autoimmune diseases, or other disorders. Mast Cell Activation Syndrome is relatively rare and can be challenging to diagnose due to its variable presentation and the need for precise timing of lab tests. Treatment typically focuses on symptom control with antihistamines, stabilizers, and avoiding personal triggers.

“MCAS” is currently being thrown out there as the “new” thing when the doctors can’t find anything specifically wrong and the patient is reacting to everything – foods and their environment, pets, etc. Several patients have proactively researched their symptoms and requested labs to test for MCAS. Both had high spike protein antibodies, and when presented with the suggestion that elevated spike protein was the underlying cause, many patients found this insufficient to explain their chronic and complex health issues. The lab tests performed were the Histamine Plasma Test and the Tryptase Test. All the patients who brought up MCAS and testing presented with POTS symptoms. Their spike protein antibody levels ranged from 1852 to over 25,000 (of the highest limit to the LabCorp test).

The following patient cases illustrate the pattern of elevated spike protein antibodies across POTS and MCAS presentations, with results ranging from 1852 to over 25,000:

- A.W. – spike protein antibodies over 25,000, 3 Pfizer vaccines.
- S.B. – spike protein antibodies were 5303 down to 4507 last year; he was seeing Dr. McCullough in 2023, who tested his spike protein antibodies, and back then, it was >800, and he had mild symptoms, which did not convince him to do Dr. McCullough’s recommendations. It’s important to note that in Aug, 2023, his symptoms were “he took 2 Moderna COVID-19 vaccines in 2021 and since that time has never felt the same, with reduced exercise tolerance, couldn’t run a mile or 15 minutes without feeling excessively fatigued, he’s had generalized muscle aches, occasional chest pain, saw a cardiologist and had an normal echo stress test and EKG, and routine blood tests, and all results were normal but he still doesn’t feel right.” In September 2025, his symptoms progressed to debilitating fatigue, pain level 8, and he was diagnosed with thoracic outlet syndrome; neck, jaw, and face pain; poor memory, poor recovery from exercise, elevated heart rate, and difficulty breathing.
- C.M. – spike protein antibodies 3040, no vaccines, got COVID 3X and 2 PCR tests.
- J.D.R. – spike protein antibodies 5511, 2 Moderna vaccines.
- J.D. – spike protein antibodies 10138 – 2 Moderna vaccines.
- S.M. – spike protein antibodies 1852 – 2 Pfizer vaccines.
- S.V. – spike protein antibodies over 25000 – 4 Pfizer vaccines.
- N.V. – spike protein antibodies over 25000 – 4 Pfizer vaccines.
- P.S. – spike protein antibodies 15354 (2025) down to 10490 (2026) – 3 Pfizer vaccines.

This clinical experience has documented damage from both COVID infection (Long COVID) and COVID vaccines.

A useful way to explain MCAS to patients is to mirror how autoimmune conditions are described. While not technically precise, the analogy resonates: “the body is overreacting to something that has made it go crazy, and now it’s responding to things that used to be normal like they are the enemy. This can include foods, cleaning or personal hygiene products, or environmental things that you did not react to prior to COVID.”

Clinical observation shows that when spike protein levels begin to drop — even by as little as 500 points — POTS and MCAS symptoms noticeably decline. Steroids, immune suppressors, and heart medications are not the solution. Reducing the underlying cause and supporting the body is the solution. With POTS and MCAS, the most common long COVID protocols are employed, supplemented with Augmented NAC, electrolytes twice daily, with a recommendation of 64 oz of Fiji water (alkaline water high in silica), and Apex Histo-X to help calm and downregulate the exaggerated immune and histamine responses.

Most people notice a difference in the first 30 days, and they are very happy in 90 days.

It has been observed that some doctors test for the spike protein once and do not follow up. Retesting is recommended after 3 or 4 months for patients with lower numbers (under 6000), and every 6 months for those with higher numbers. If their number is over 25,000, you don’t know the exact number; it could be 150,000, so it could take a long time to see a measurable number under 25,000. Patients are given these expectations accordingly.

A few other observations are worth noting. In the last 3 years, several rare autoimmune disorders have presented in this practice. One notable case involved

a 30-year-old who received a COVID shot just prior to a torn rotator cuff surgery and within 6 months was diagnosed as a type 1, insulin-dependent diabetic. It turns out that he has LADA (Latent Auto-immune Diabetes in Adults).

- Main symptoms - Joint hypermobility — Joints are overly flexible ("double-jointed"), leading to frequent dislocations, subluxations, chronic pain, and early arthritis.
- Skin changes — Stretchy, velvety, or fragile skin that bruises easily and heals poorly (wide, thin "cigarette paper" scars).
- Tissue fragility — Blood vessels, organs, or other tissues can be weaker in some types, leading to serious complications.

Severity ranges from mild (mostly joint pain and flexibility) to severe and life-threatening (especially in vascular EDS, which can involve arterial ruptures).

There is hope that better recognition of these syndromes, validated biomarker research, more extensive labs and other tests will be performed on patients (especially autoimmune markers, EBV, and SARS CoV-2 Spike Protein Antibodies), longitudinal cohort studies, and integration into primary care training will help assess and support patients with these complex health issues. The IMA is doing a great job with education and resources to help doctors meet these goals.

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