

# March Musings: Skepticism in the news



## Why don't health authorities believe in natural selection?

One of the arguments that's being mustered in a push to overcome vaccine hesitancy is that new variants of the Coronavirus are rapidly emerging; that trend necessitates widespread acceptance of the jab in a race to eradicate the virus before it has a chance to mutate.

There's some persuasive logic to this. It's been theorized that resistant variants have arisen in immunosuppressed individuals who languish in hospitals with exceptionally long courses of COVID. They, in effect, become human Petri dishes for the Coronavirus, allowing it time to perfect its repertoire of defenses to evade current drugs and vaccines.

Last week, *The New York Times* reinforced the narrative about new dangerous, potentially vaccine-resistant variants by jumping the gun on a preliminary report about a new strain of COVID—ominously dubbed the “New York variant”—based on a very preliminary unpublished report by some Columbia University investigators.

“Be Skeptical:” reported NBC news. “NYC Health Officials Race to Quell Concerns After *NYT* Variant Report”. City health officials were quick to label the *Times* story as “pathogen porn” unhelpful to public health efforts, and not well-substantiated.

Above all, reinforcing fear.

The *Times* is on record as favoring lockdowns. News of improving infection rates, hospitalizations and deaths is met with pessimistic exhortations like “The Coronavirus is Plotting a Comeback: Many Experts Predict a Rise in Infections as New Variants Spread (but this time the surge will be blunted by vaccines, and hopefully, widespread caution)”.

But being scientifically objective, isn't it equally plausible that the very vaccines we're using to stem the tide of COVID could provide the selection pressure that will spawn variants?

In fact, in a 2018 article written well before the current pandemic, scientists speculated: “Vaccines Are Pushing Pathogens to Evolve”.

It makes sense: “Just as antibiotics breed resistance in bacteria, vaccines can incite changes that enable diseases to escape their control,” they assert.

“Selection pressure” is a concept formulated by Charles Darwin, the father of modern evolutionary theory. As when a mass extinction event killed off the dinosaurs but allowed new, species—early mammals—to survive because of their accelerated evolution under environmental stress. Whatever offed the T. Rex, nimble survivors developed resistance to it. Adapt, or die. And the Coronavirus has already evinced remarkable resilience.

Not to worry. Moderna and Pfizer are already racing to perfect new vaccines that will keep up with the variants. Some speculate that getting Coronavirus shots will become an annual routine, as with the flu shot.

There's little doubt these vaccines work to prevent sickness and death from COVID. But to market them as a solution to the emergence of resistant variants, without considering natural selection, is intellectually dishonest.

### **Study says: If you claim your statin's bothering you, it's probably all just in your head**

Early in the rollout of statins years ago, I heard a spokesperson for the American Heart Association rave on TV that these were “wonder drugs” with side effects so rare that only 1 in 20,000 would experience them.

“That's funny,” I thought to myself. I have a practice of far fewer than 20,000 patients, of which only a small percentage take statins. “How come not a month goes by that I don't encounter a patient who complains of muscle aches, weakness, leg pains, brain fog, etc. that miraculously resolve when they stop their statin?”

According to a new study, which I'm afraid will embolden lots of doctors to dismiss patients' complaints while on statins, it's all due to a “nocebo effect”. That's the opposite of the well-known placebo effect. If you expect side effects even from a harmless sugar pill, you may experience a nocebo.

The authors of the **BMJ** study state “we found no differences for the effect of muscle symptoms on aspects of daily life (general activity, mood, ability to walk, normal work, relationships with other people, sleep, and enjoyment of life) between the statin and control periods.”

It may be that some people, convinced of the harmful effects of statins, imagine they're experiencing side effects. And, indeed, the very people who take statins are

likely to be older and subject to the daily aches and pains attendant to their age, and erroneously attribute them to the drugs.

But I can't accept that this study exonerates statins as a frequent cause of side effects. It's well known that statins deplete coenzyme Q10, which causes weakness. The effect can only be partially alleviated by taking CoQ10 or ubiquinol. There's some suggestion that adequate levels of vitamin D may offer a modest hedge against statin muscle pain.

Statins are also known to raise creatine phosphokinase (CPK) in susceptible individuals—a sign of muscle damage. And that's not obviated by taking CoQ10.

There are even well-documented instances where people's congestive heart failure got better when they stopped their CoQ10-depleting statins and supplemented with high-dose ubiquinol. After all, the heart's a muscle!

Admittedly, the majority of patients take statins without a problem. It appears that the tendency to experience side effects is genetic, subject to biochemical individuality.

I've seen patients who can't take certain statins, but tolerate others; some, who have to take minimal amounts, like the lowest dose only three times per week, or risk side effects; others are so sensitive that they can't even take red yeast rice, which is usually fine for people who don't do well on cholesterol medication, although it contains small amounts of natural statins.

Is it all in their heads, as this *BMJ* article implies? A 2017 study investigated physician attitudes toward patient claims of statin intolerance, and how their viewpoints shifted when they themselves experienced it as patients (**Physicians' Experiences as Patients with Statin Side Effects: A Case Series**)

*They concluded: "Poor awareness of statin problems by medical providers, and low receptiveness to reports of such problems, can extend even to patients when they themselves are physicians . . . Greater awareness of these problems, and greater compassion when patients present with these conditions may be merited."*

Nothing like a little statin-induced leg pain and weakness to reawaken your empathy!