

HPA-D or Adrenal Fatigue? Part 4

So if it's not adrenal fatigue, what should we call it? I think more appropriate terms for the syndrome that we're referring to would be HPA axis dysfunction or HPA axis maladaptation. Truthfully, I think maladaptation is an even better term than dysfunction, because as we've discussed, many of the changes that are observed in this syndrome are due to a body's attempt to protect itself from chronically or severely elevated cortisol levels, but unfortunately those steps that are protective in the short term become maladaptive over the long term, so technically it's not really a dysfunction, it's an adaptation that has negative consequences, which is of course a maladaptation. But this term "HPA axis dysfunction" is already kind of out there in the wild as an alternative. I think I can take some responsibility, I'm guilty of putting it out there, so I'm not sure how important it is now to switch that over to HPA-M or HPA axis maladaptation, but whatever term you use, they're both far more accurate than adrenal fatigue.

The other option here is to shift toward naming the particular mechanism or pattern that we're observing, so for example if a patient has high cortisol, we would call it hypercortisolism. If they do actually have both low free and total cortisol, we would call it hypocortisolism, because that's just naming what we're seeing, low output of cortisol, and the term hypocortisolism doesn't imply that that low cortisol is from fatigued adrenals, so it's a more accurate way of referring to it. Or if the patient has high cortisol at night and low in the morning, we could call that disrupted diurnal rhythm, or if they have really high levels of cortisone, for example, relative to cortisol, we could call that impaired cortisol metabolism. So we can use these very specific terms that refer to the particular dysfunction instead of even just a broad term like HPA axis dysfunction.

Why does this matter?

1

Brings us into
**alignment with
current evidence**

2

Helps clinicians and
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3

Leads to **better
treatment outcomes**
and prevents harm

So why does this matter so much? First, it brings us into alignment with the current evidence base, and that allows us to leverage the vast amounts of research connecting stress and the HPA axis function with disease outcomes. Second, having a more accurate framework helps

clinicians and patients to better understand what's happening. This is really important because if we have this idea that the problem is caused by drained adrenal glands, we have very few options there. We don't have a lot of research or many treatments available to us that can affect drained adrenal glands or adrenal insufficiency, we're really limited, but if we understand that this is really an issue with the brain and central nervous system regulation of the HPA axis and tissue-specific regulation of cortisol, there are vastly more alternatives for intervention. We can look at things like glycemic dysregulation, circadian disruption, and inflammation, and we have a lot more options available to us. Third, it leads to better treatment outcomes and prevents harm. We talked about this before, but I can't emphasize it enough, if we see low cortisol on the saliva test and we just go in there and prescribe things to increase cortisol and it turns out that the patient actually already has high total cortisol, we could make them worse.

The term adrenal fatigue did serve a purpose when we lacked more sophisticated understanding of the relationship between the HPA axis and the SAS and stress-related pathology, and there's no doubt that interventions prescribed in this adrenal fatigue model have helped people and continue to help people, but as our knowledge has progressed, I think these oversimplified explanations become an impediment. An analogy would be good and bad cholesterol; this was a simple heuristic created to raise awareness in the general population about the relationship between diet and heart disease, but as our understanding of the roles of LDL and HDL have grown, it turns out it's much more nuanced and complex, and this good/bad label is an oversimplification that doesn't serve patients or clinicians.

I would argue that it's time to lay the adrenal fatigue concept to rest. As Max Planck famously said, "Science progresses one funeral at a time." If we want to move forward, we have to be willing to continually challenge our beliefs and let go of them when the evidence doesn't support them, and I hope I've shown that to be the case with adrenal fatigue in this presentation.

As you know, the key concept of functional medicine, one of them at least, is to identify and treat the underlying cause of disease, and this more accurate understanding of the mechanisms of HPA axis dysfunction or maladaptation will allow us to create more effective treatments. It also, again, brings us into alignment with the research that's being done on this topic, which opens an opportunity for dialogue and collaboration with researchers and clinicians that have perhaps rightfully so scoffed at the notion of adrenal fatigue, and this will in turn push our understanding even more once we bring ourselves into alignment with the work that's being done in this area, and it will allow us to start answering some of the unanswered questions. Okay, that's it for now, I'll see you next time.