Dear Patient,

Many of you have been asking about the HVHAC prevention and treatment protocols for COVID-19 (apart from established CDC guidelines) with scientific references. We sent these out in email blasts from our office, but I am reposting them again for your benefit. Listed below are the two peer-reviewed scientific articles that I published in the medical literature in 2020 on COVID:

Horowitz, R.I., Freeman P, Bruzzese, J. Efficacy of glutathione therapy in relieving dyspnea associated with COVID-19 pneumonia: A report of 2 cases. Respiratory Medicine Case Reports, April 21, 2020

Article Number: 101063

https://doi.org/10.1016/j.rmcr.2020.101063

R.I. Horowitz, P.R. Freeman, Three Novel Prevention, Diagnostic and Treatment Options for COVID-19 Urgently Necessitating Controlled Randomized Trials, Medical Hypotheses (2020)

https://www.sciencedirect.com/science/article/pii/S0306987720308276?via%3Dihub

These publications were highlighted in two local news station reports:

Dr H, Glutathione study, News 10 Albany:

https://www.news10.com/?p=399270&preview=true&_thumbnail_id=399278

Dr H discusses success of GSH, News 12 Westchester:

 $\underline{http://westchester.news12.com/story/42383284/hudson-valley-doctor-touts-lyme-disease-treatment-as-option-for-covid19-patients}$

Regarding dosage of the nutritional supplements listed below, it varies based on whether it is for prevention or treatment. QD=once a day; BID= twice a day; TID=three times a day.

Prevention: NAC 600 mg BID (twice a day), Alpha lipoic acid (ALAMAX, Xymogen) 600 mg once to twice a day (lower doses are used if there is a history of severe hypoglycemia), glutathione 250-500-750 mg twice a day (i.e., BID) depending on age/risk factors (I am taking 750 mg BID based on my age and recent spike in cases in Dutchess County, NY), curcumin (Curcuplex CR, Xymogen) 500-1000 mg twice a day, sulforaphane glucosinolate 100 mg twice a

day (Oncoplex-ES, Xymogen, i.e., broccoli seed extract), zinc 40-50 mg/day, Vit C 1 gram TID (three times a day), 3,6 Beta glucan (Immunotix, Xymogen) 500 mg per day, Vit D 5000 IU/day, and melatonin 1 mg at bedtime. This protocol is based on solid peer-reviewed science which shows that this approach can support healthy immune and inflammatory responses. Please see the document on our randomized, controlled trial for further scientific information.

For active infection: NAC is doubled to two twice a day (1200 mg twice a day), and glutathione dosing goes up to 2000 mg 3 x per day (liposomal is preferable), with an increase in Vit C to 2000 mg three times a day (TID). The rest of the supplements can remain the same, as listed above. Along with the nutraceuticals, we have been using ivermectin (0.2 mg/kg) once a day for 14 days based on 26 peer-reviewed articles, 10 of them randomized trials showing efficacy for COVID. The above protocol has worked well so far for over 50 active COVID-19 patients. Not one of my chronic Lyme patients has ended up in a hospital to date if they used this protocol (as of Dec 21st, 2020), and none have become COVID longhaulers.

I hope that is helpful. Wishing everyone the best of health. Stay safe!

Dr Richard Horowitz

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Member, HHS Babesia and Other Tick-borne Pathogens 2019-2020