



March 13, 2020

Dear Patients,

I am sure you are aware of, and have concerns for, the Coronavirus. I want to take a moment to offer some background information on the virus, how we are responding to this situation at clinic, and what you can do to prevent infection, and some treatment options should you acquire the illness. Additionally, many of you have the diagnosis of Chronic Inflammatory Response Syndrome (CIRS), which may pose an additional risk. I will address this special population as well.

COVID-19 Background (from cdc.gov)

The World Health Organization has officially announced a pandemic due to the outbreak of a respiratory disease caused by a novel (new) coronavirus that was first detected in China and which has now been detected in more than 100 locations internationally, including in the United States. The virus has been named “SARS-CoV-2” and the disease it causes has been named “coronavirus disease 2019” (abbreviated “COVID-19”).

Coronaviruses are a large family of viruses that are common in people and many different species of animals, including camels, cattle, cats, and bats. Rarely, animal coronaviruses can infect people and then spread between people such as with MERS-CoV, and now with this new virus (named SARS-CoV-2).

The complete clinical picture with regard to COVID-19 is not fully known. Reported illnesses have ranged from very mild (including some with no reported symptoms) to severe, including illness resulting in death. While information so far suggests that most COVID-19 illness is mild, a report external icon out of China suggests serious illness occurs in 16% of cases. Older people and people of all ages with severe underlying health conditions — like heart disease, lung disease and diabetes, for example — seem to be at higher risk of developing serious COVID-19 illness.

COMMON COVID-19 QUESTIONS & TIPS:

The virus causes respiratory illness (flu-like) with symptoms such as:

- Cough
- Fever
- Malaise – lack of energy – feeling “bad”
- Pneumonia in severe cases

At the time that we are sending this, there are currently over 1000 cases of coronavirus infections in the US with that number changing daily. Doctors are trying to treat the COVID-19 symptomatically – treating cough, lung issues, infections with anti-viral medications and chloroquine – but there is no current treatment of choice. There is currently no vaccine to prevent coronavirus disease, but development of one is being expedited.

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Who's at risk?

Most all of us are at risk of catching this virus if we're exposed to a carrier – someone that we come into close contact with or through touching a surface that has oral saliva droplets or nasal discharge on it from an infected person who has touched it. However, those at highest risk are:

1. The Elderly
2. Those with long-term health conditions like heart disease, diabetes, liver/kidney conditions
3. Those who are actively sick with a condition are at most risk of catching this virus, especially if the condition compromised their immunity.
4. Those who are working or living around large populations – such as healthcare workers, nursing home residents, rescue centers, large population meetings/events/gatherings

Steps To Prevent Illness

The best way to prevent illness is to avoid being exposed to this virus.

- The virus is thought to spread mainly from person-to-person.
- Between people who are in close contact with one another (within about 6 feet).
- Through respiratory droplets produced when an infected person coughs or sneezes.
- These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.

Clean your hands often

- Wash your hands often with soap and water for at least 20 seconds especially after you have been in a public place, or after blowing your nose, coughing, or sneezing.
- If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol. Cover all surfaces of your hands and rub them together until they feel dry.
- Avoid touching your eyes, nose, and mouth with unwashed hands.

Avoid close contact

- Avoid close contact with people who are sick
- Put distance between yourself and other people if COVID-19 is spreading in your community. This is especially important for people who are at higher risk of getting very sick.

Stay home if you're sick

- Stay home if you are sick, except to get medical care.
- Learn what to do if you are sick.

Cover coughs and sneezes

- Cover your mouth and nose with a tissue when you cough or sneeze or use the inside of your elbow.
- Throw used tissues in the trash.
- Immediately wash your hands with soap and water for at least 20 seconds. If soap and water are not readily available, clean your hands with a hand sanitizer that contains at least 60% alcohol.

Wear a face mask if you are sick

- If you are sick: You should wear a facemask when you are around other people (e.g., sharing a room or vehicle) and before you enter a healthcare provider's office. If you are not able to wear a facemask (for example, because it causes trouble breathing), then you should do your best to cover your coughs and sneezes, and people who are caring for you should wear a facemask if they enter your room.
- If you are NOT sick: You do not need to wear a facemask unless you are caring for someone who is sick (and they are not able to wear a facemask). Facemasks may be in short supply and they should be saved for caregivers.

Clean and disinfect

- Clean AND disinfect frequently touched surfaces daily. This includes tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, and sinks.
- If surfaces are dirty, clean them: Use detergent or soap and water prior to disinfection.

To disinfect:

Most common EPA-registered household disinfectants will work. Use disinfectants appropriate for the surface.

Options include:

- Diluting your household bleach.
To make a bleach solution, mix:
 - 5 tablespoons (1/3rd cup) bleach per gallon of water
OR
 - 4 teaspoons bleach per quart of water

Follow manufacturer's instructions for application and proper ventilation. Check to ensure the product is not past its expiration date. Never mix household bleach with ammonia or any other cleanser. Unexpired household bleach will be effective against coronaviruses when properly diluted.

- **Alcohol solutions.**
Ensure solution has at least 70% alcohol.

Clinic Procedures and Protocols

We currently do not have test kits at clinic, and do NOT anticipate acquiring them. Please utilize your primary care physician to determine appropriate testing resources.

The clinic will follow cleaning guidelines for health care facilities and employ measures to reduce risk of transmission.

If you decide to seek care at clinic - *while experiencing symptoms resembling the flu* - please alert clinic staff **beforehand** and you **MUST** wear a mask when entering the facility.

What can I do to strengthen my immune system?

- Stay hydrated. Drinking plenty of water helps to keep your protective mucous barrier in your nasal passage from drying out.

- Make sure you are getting good sleep. Studies have shown that getting 5 hours of sleep a night can make you as much as 9 times more likely to get a flu. So, a good night's sleep means better immunity. Strive for 7 – 9 hours.
- Manage stress, getting nervous and “freaked out” does not help your immune system. It literally shifts you into “fight or flight” and that weakens your host defense. If you are under chronic stress from work or family situations, take steps to reduce the stress response with meditation or doing deep breathing techniques a few times a day, like box breathing. (Inhale 4 seconds -hold 4 seconds-exhale 4 seconds-hold 4 seconds.) Even relaxing baths and a little aromatherapy can help.
- Eat healthy better beverage alternatives! – increase fresh veggies, if eating meat try to get organic or free range; eat 1 or 2 fruits servings per day; decrease drastically your consumption of sugar and refined carbs, like baked goods, deserts, soft drinks; and fruit juices. Better beverage alternative to consider are sparkling waters, healthy milk alternatives such as flax milk, and coconut water (high in electrolytes).
- Get moderate exercise - it reduces stress and actually stimulates immune function.

Daily Preventive Measures: Oral Natural Compounds

There are a number of natural compounds that possess anti-viral properties and improve immune response. Please note, none of these agents have been studied in coronavirus specifically.

1) N-Acetyl Cysteine (NAC from Thorne) - 1000 mg twice per day has been shown to reduce symptoms and improve immunity.

S De Flora, C Grassi, L Carati. Attenuation of influenza-like symptomatology and improvement of cell-mediated immunity with long-term N-acetylcysteine treatment
European Respiratory Journal 1997 10: 1535-1541

Geiler J1, Michaelis M, Naczek P, Leutz A, Langer K, Doerr HW, Cinatl J Jr. N-acetyl-L-cysteine (NAC) inhibits virus replication and expression of pro-inflammatory molecules in A549 cells infected with highly pathogenic H5N1 influenza A virus. *Biochem Pharmacol.* 2010 Feb 1;79(3):413-20.

2) Wellmune WGP (WholeMune from Ortho Molecular) – 1 capsule daily. The primary active ingredient is Wellmune WGP®- a natural beta 1,3/1,6 glucan derived from the cell wall of a proprietary strain of baker's yeast (*Saccharomyces cerevisiae*). Wellmune has become the subject of over 800 scientific studies and shown in clinical trials to have a potent effect on immune responsiveness and to defend the system from the effects of recurring stress.

Talbott S, Talbott J. Beta 1,3/1,6 glucan decreases upper respiratory tract infection symptoms and improves psychological well-being in moderate to highly-stressed subjects. *Agro FOOD Industry hi-tech* 2010;21(1):21-24.

Talbott S, Talbott J. Effect of BETA 1, 3/1, 6 GLUCAN on upper respiratory tract infection symptoms and mood state in marathon athletes. *J Sports Sci Med.* 2009;8: 509-515.

K. C. Carpenter, W. L. Breslin, T. Davidson, A. Adams and B. K. McFarlin. Baker's yeast β -glucan supplementation increases monocytes and cytokines post-exercise: implications for infection risk? 21 May 2012 by Wellmune in Clinical Research, Research. *British Journal of Nutrition*, FirstView Article : pp 1-9.

3) Thymus Protein Extract (Eco Thymus from Professional Health Products) – 2 caps twice per day. Thymus extract is a chemical that can be man-made or produced from the glands of cows.

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Thymus extract is used for infectious diseases including recurrent respiratory infections, colds, flu, H1N1 “swine” flu, hepatitis B, hepatitis C, Epstein-Barr virus (EBV), mononucleosis, herpes and shingles, sinusitis, and AIDS/HIV. It is also used for asthma, hay fever, food allergies, cancer, rheumatoid arthritis (RA), chronic fatigue syndrome (CFS), and systemic lupus erythematosus (SLE). Other uses include maintaining white cell production in cancer patients treated with radiation or chemotherapy, and preventing the effects of aging.

Calsini P, Mocchegiani E, Fabris N. The pharmacodynamics of thymomodulin in elderly humans. *Drugs Exp Clin Res* 1985;11:671-4.

Cavagni G, Piscopo E, Rigoli E, et al. Food allergy in children: an attempt to improve the effects of the elimination diet with an immunomodulating agent (thymomodulin). A double-blind clinical trial. *Immunopharmacol Immunotoxicol* 1989;11:131-42.

De Martino M, Rossi ME, Muccioli AT, Vierucci A. T lymphocytes in children with recurrent respiratory infections: effect of the use of thymostimulin on the alterations of T-cell subsets. *Int J Tissue React* 1984;6:223-8.

De Mattia D, Decandia P, Ferrante P, et al. Effectiveness of thymostimulin and study of lymphocyte-dependent antibacterial activity in children with recurrent respiratory infections. *Immunopharmacol Immunotoxicol* 1993;15:447-59.

Fiocchi A, Borella E, Riva E, et al. A double-blind clinical trial for the evaluation of the therapeutical effectiveness of a calf thymus derivative (Thymomodulin) in children with recurrent respiratory infections. *Thymus* 1986;8:331-9.

Galli L, de Martino M, Azzari C, et al. [Preventive effect of thymomodulin in recurrent respiratory infections in children]. *Pediatr Med Chir* 1990;12:229-32.

4) Plant Sterolins (Moducare from Wakunaga) – 2 caps morning, 1 cap evening. The BSS:BSSG complex is a new, natural immune modulator which has demonstrated promising results in a number of clinical trials. These important plant constituents seem to specifically target T-helper cells, and may help to restore balance between TH1 and TH2 cells. The end result of this immune modulation is an increase in TH1-related cytokines, a decrease in TH2-related cytokines, increased lymphocyte proliferation, and greater NK cell activity.

The BSS:BSSG complex has also been shown to help normalize the DHEA:cortisol ratio, which can have profound positive results on the immune system. The re-establishment of these immune parameters may be of help in numerous disease processes relating to chronic immune-mediated abnormalities, including chronic viral infections, tuberculosis, rheumatoid arthritis, allergies, cancer, and autoimmune diseases.

Breytenbach U, Bouic PJD. Flow cytometric analysis of the TH1-TH2 balance in healthy individuals and patients infected with the Human Immunodeficiency virus (HIV). 25th Annual Congress of the Physiology Society of Southern Africa; 1997.

Shearer GM, Clerici M. Cytokine profiles in HIV Type 1 disease and protection. *AIDS Res Hum Retroviruses* 1998;14:S149-S152.

Intravenous Treatment as Preventive and for Acute Infection

1) IV Vitamin C 30 grams has been shown to have potent antiviral properties in high doses, and functions differently in this regard compared to oral forms of Vitamin C. There are reports of Chinese hospitals using IVC to treat coronavirus patients.

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For prevention – weekly IV Vitamin C 30 grams or higher (up to 75 grams)

For Acute Infections– daily IV Vitamin C 50 grams until resolution of symptoms

Injectable Therapy

1) Thymosin Alpha 1 – A very powerful prescription immune booster produced at a specialized pharmacy.

Thymosin alpha-1 is a synthetic thymic peptide used to improve immune responses in times of need. The thymus is a gland located behind your sternum and between the lungs. It produces the protein hormone thymosin which stimulates the immune system to develop disease fighting T-cells. Studies report thymosin alpha-1: Thymosin alpha-1 has been used to support immunity in over 3,000 patients and in over 70 clinical studies, either alone or in combination with other medications.

Acute Infections

1) Glutathione (GSH) cyclodextrin spray – a prescription topical spray that eliminates viral infections in several days of treatment. 4 sprays topically every four hours. Please contact clinic if you would like a prescription.

This product is so powerful that I have assembled a research team to submit an application to the Concept Acceleration Program, Office of Biodefense, Research Resources & Translational Research at NIH to study this particular formulation as an effective treatment for COVID-19.

GSH is the most powerful intracellular antioxidant and directs the detoxification of a variety of electrophilic compounds and peroxides via catalysis by glutathione-S- transferases (GST) and glutathione peroxidases (GPx). An imbalance in GSH is observed in a wide range of pathologies, such as cancer, neurodegenerative diseases, cystic fibrosis (CF), several viral infections including HIV-1, as well as in aging⁶.

Viral infection is often associated with the redox modifications characteristic of oxidative stress. Alteration of the endogenous levels of GSH has been found in experimental infections in vitro with herpes simplex virus type 1 (HSV-1) , Sendai virus, HIV and in vivo with influenza A virus and HSV-1. GSH levels are decreased in plasma, peripheral blood mononuclear cells and monocytes in asymptomatic HIV infected individuals and in AIDS patients.

Cyclodextrins have been shown to play a key role in the treatment and prevention of coronavirus. Infection by enveloped viruses including coronavirus and influenza virus is mediated by viral binding to cellular receptors and fusion of the viral envelope with the host cell membrane. Evidence suggests that cholesterol present in microdomains in the viral envelope and cell membrane are required for successful entry of enveloped viruses into the host cell.

2) Andrographis (Douglas Labs) – (*Andrographis paniculata*) is a potent antiviral botanical; Andrographis was found effective in upper respiratory infection treatment in a 2010 human

study of 223 virally-infected patients ; take 300mg twice daily standardized to at least 10-50% andrographolides

3) English Ivy syrup – (Genestra/Seroyl) 1 teaspoonful 3-4 times daily; this is amazing for cough and phlegm production in the lungs; it has been used in Europe for decades as #1 lung product

4) Monolaurin (Ecological Formulas) – 600mg monolaurin, three times daily; monolaurin is glycerol monolaurate, a medium-chain fatty acid derived from coconut oil and also found in human breast milk; it possesses potent antibiotic, antiviral activity and is effective for immune support.

CIRS Patients

A fundamental defect in the immune system occurs in CIRS patients (HLA derived poor antigen presentation) that prevents adequate production of antibodies to pathogens, including viruses such as COVID-19.

Additionally, due to restricted pulmonary vasculature blood flow and high baseline levels of pulmonary inflammation, we do worry about the impact on this population. Some of our patients are far enough along in their treatment path, though, that they have corrected these underlying issues.

How do I know if I am at risk? Our only tool is the GENIE transcriptomics test, which identifies those patients with continued poor antigen presentation.

In addition to the oral preventive measures listed above, THYMOSIN ALPHA 1 has been shown to improve antigen presentation and increase antibody production to immune threats.

Summary

What are my treatments options?

For prevention

- 1) NAC
- 2) WholeMune
- 3) Eco Thymus
- 4) Moducare
- 5) Thymosin Alpha 1 (rx)
- 6) IV Vitamin C weekly

For Acute Symptoms

- 1) Glutathione cyclodextrin spray (rx)
- 2) IV Vitamin C
- 3) Andrographis
- 4) English Ivy Syrup
- 5) Monlaurin

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CIRS

- 1) See preventive measures with special attention to Eco Thymus and TA1
- 2) See acute measures
- 3) Consider GENIE test to stage your progress

How Do I Order These Products?

NAC, WholeMune and Moducare, Andrographis and Monolaurin can be ordered on Wellevate

<https://wellevate.me/VC4HW>

Eco Thymus – clinic will need to order from Professional Health Products for you. Please contact the front desk.

TA1 (~\$200-300/month) and Topical Glutathione spray (\$179) – contact Dr. Heyman or Jessica Scalzo, NP to submit prescription.

Call clinic to schedule IVC. You will need a serum G6PD on file (from Lab Corp or Quest).

GENIE (~\$900) test can be ordered online at survivingmold.com. Your blood is drawn at clinic.

If you have any questions or concerns, please do not hesitate to contact clinic.



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