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CCM NEWSLETTER- Part 1

Dr. Jorge Duchicela and Dr. Ima Duchicela Tanner

Up-to-Date Guideline for COVID-19 Treatments

In the past months, we have reviewed what is COVID-19, how it is transmitted, how to test for it; and lastly how to protect yourself against it. This month we will review the most current treatments for COVID-19. The information is gathered from three trustworthy sources:

- 1.) The Center for Disease Control website www.cdc.gov
- 2.) The National Institutes of Health website www.covid19treatmentguidelines.nih.gov
- 3.) www.ClinicalTrials.gov

We highly encourage you to visit these websites to read more about the current treatments and those that are still under investigation. As always, we caution you about the accuracy of information from social media sources.

The process of the COVID-19 infection is thought to occur in 2 steps.

First Step: This is like an acute respiratory syndrome (think cold and flu like symptoms).

Second Step: This is like an overblown immune/inflammatory reaction your body has to the virus which leads to tissue damage.

Based on this disease process, scientists and medical professionals have created guidelines for the treatment of COVID-19. The panel members continually review the most recent clinical data to provide recommendations for managing patients with COVID-19 based on how severe the symptoms are.

Below are 2 easy to read charts that give you what you need to know about these treatments.

Antiviral Drugs

*These drugs aim to treat **STEP ONE** of the infection.*

Drug Name	Panel Recommendations	Additional Info
<i>Remdesivir</i>	<ul style="list-style-type: none"> ● For use in hospitalized patients who require very little extra oxygen ● <i>NOT for use in mild to moderate cases</i> (those not hospitalized) 	<ul style="list-style-type: none"> ● The ONLY FDA approved drug for the treatment of COVID-19 ● Can be used with steroids- but only in specific scenarios
<i>Chloroquine or Hydroxychloroquine</i>	<ul style="list-style-type: none"> ● DO NOT USE in treatment of COVID-19 	<ul style="list-style-type: none"> ● The evidence for this recommendation is strong and is backed by many good trials that all agree that this is NOT a treatment option ● The studies with this drug had to be stopped early because it was shown to be so ineffective at treating COVID.
<i>Lopinavir/Ritonavir (HIV drugs)</i>	<ul style="list-style-type: none"> ● DOT NOT USE for treatment of COVID-19 	<ul style="list-style-type: none"> ● Clinical Trials are still being conducted at this time for these types of drugs
<i>Ivermectin</i>	<ul style="list-style-type: none"> ● DO NOT USE for COVID-19 treatment 	<ul style="list-style-type: none"> ● <i>Not approved for treatment of ANY viral infection</i> ● Ivermectin intended for animal use <i>should NOT</i> be used to treat humans

Immune Based Therapy:

*This type of treatment attempts to fight the **SECOND PART** of the infection (the hyperactive immune response), by trying to influence how our immune system reacts to the virus*

Therapy	Panel Recommendation	Additional Info
<i>Casirivimab + Imbedvimab</i>	<ul style="list-style-type: none"> ● Allows use for treatment of COVID in NON-HOSPITALIZED patients and kids older than 12 who are at high risk for progressing to severe infection ● DO NOT USE if hospitalized or the patient needs extra oxygen 	<ul style="list-style-type: none"> ● High risk criteria: <i>BMI >35, chronic kidney disease, diabetes, immunocompromised or those getting immunosuppressive treatments, 65 years or older, or 55 years with heart disease, high blood pressure or COPD</i> ● This treatment is available in limited areas and facilities may need advance notice to order the therapy.
<i>Plasma from recovered COVID-19 patients (Convalescent Plasma)</i>	<ul style="list-style-type: none"> ● Insufficient data to recommend for or against use 	<ul style="list-style-type: none"> ● Since there is not strong recommendation for or against- you will see this treatment done in various places
<i>Steroids (Dexamethasone)</i>	<ul style="list-style-type: none"> ● Can be used in SPECIFIC SITUATIONS 	<ul style="list-style-type: none"> ● Steroids are typically saved for patients that are <i>hospitalized and need extra oxygen</i> ● Can sometimes be used with the antiviral Remdesivir

So far, we have covered the antiviral medications and the immune based therapies. However, there are other therapies that are frequently used in patients with COVID-19. Many of these therapies are currently being studied in clinical trials.

A. Blood Thinners

- a. Blood clots have also been found in patients with severe COVID-19 infection- notable in the lungs
- b. Studies are being conducted to determine the exact role blood thinners have in prevention of COVID-19 complications

B. Vitamin C

- a. An antioxidant that has anti-inflammatory properties
- b. *Why is it being studied?* It is thought that humans may need more Vitamin C when they are very sick
- c. **NOT ENOUGH** data to recommend for or against use of Vitamin C in treating any COVID-19 patients-- mildly ill or severely ill
- d. Vitamin C will not necessarily harm you unless you take more than the recommended dosing (65-90mg per day)
- e. *Megadoses of Vitamin C (like more than 2000mg per day) may cause diarrhea, vomiting, belly aches, headaches, insomnia*

C. Vitamin D

- a. Important for bone and mineral use
- b. *Why is it being studied?* The receptor for this vitamin can be found on immune cells (remember the T-Cells and B-cells we talked about?)--> therefore it is thought that vitamin D can help improve and change our immune response for the better by protecting us against infection or decreasing the severity of the disease.
- c. **NOT ENOUGH** data to recommend for or against the use of vitamin D to prevent or treat COVID-19
- d. Studies have shown that high dose Vitamin D **DOES NOT REDUCE how long you stay in the hospital or the death rate**
- e. Too much vitamin D can cause high levels of Calcium (which is bad), problems with your kidneys, and liver toxicity

D. Zinc

- a. *Why is it being studied?* High levels of zinc inside your cells is *thought* to prevent certain viruses from reproducing

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- b. Zinc has NOT been shown to have clinical benefit and MAY BE HARMFUL→ the panel RECOMMENDS AGAINST using zinc supplementation more than the dietary recommendation.
 - c. *How much is the dietary allowance?*
 - i. 11 mg for men
 - ii. 8 mg for non-pregnant women

There may be many more home remedies or treatments suggested by various sources-- just know that those are not recommended. The ones listed in this newsletter are the most up to date guidelines of approved and studied therapies. **WE AGAIN ENCOURAGE YOU TO VISIT THE WEBSITES LISTED AT THE BEGINNING OF THE NEWSLETTER – AS THEY ARE UPDATED REGULARLY.**

The vaccine is becoming more accessible with every passing week. We hope that you are taking the opportunity to become vaccinated against COVID-19.

Below is the website for the Texas Department of State Health Services COVID-19 page. Here you can find which locations have been sent the vaccine. Click on VACCINE ALLOCATION and click the most recent week. Scroll to find locations near you. ***Call them. Get on a list. Get your vaccine.***

<https://www.dshs.texas.gov/coronavirus/immunize/vaccine.aspx>