

Mini Review

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Ivermectin is Potential Game Changer in COVID-19

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Introduction

Ivermectin is an FDA-approved broad spectrum anti-parasitic agent that in recent years we, along with other groups, have shown to have anti-viral activity against a broad range of viruses. Ivermectin, stopped the SARS-CoV-2 virus growing in cell culture within 48 hours. The causative agent of the current COVID-19 pandemic, SARS-CoV-2, is a single stranded positive sense RNA virus that is closely related to severe acute respiratory syndrome corona virus (SARS-CoV). Studies on SARS-CoV proteins have revealed a potential role for IMP α / β 1 during infection in signal-dependent nucleocytoplasmic shuttling of the SARS-CoV Nucleocapsid protein that may impact host cell division. In addition, the SARS-CoV accessory protein ORF6 has been shown to antagonize the antiviral activity of the STAT1 transcription factor by sequestering IMP α / β 1 on the rough ER/Golgi membrane. Taken together, these reports suggested that ivermectin's nuclear transport inhibitory activity may be effective against SARS-CoV-2.

At 24 h, there was a 93% reduction in viral RNA present in the supernatant (indicative of released virions) of samples treated with ivermectin compared to the vehicle DMSO. Similarly a 99.8% reduction in cell-associated viral RNA (indicative of unreleased and unpackaged virions) was observed with ivermectin treatment. By 48 h this effect increased to an ~5000-fold reduction of viral RNA in ivermectin-treated compared to control samples, indicating that ivermectin treatment resulted in the effective loss of essentially all viral material by 48 h. No toxicity of ivermectin was observed at any of the time points tested, in either the sample wells or in parallel tested drug alone samples. Ivermectin has antiviral action against the SARS-CoV-2 clinical isolate in vitro, with a single dose able to control viral replication within 24–48 h in our system.

Ivermectin has an established safety profile for human use and is FDA-approved for a number of parasitic infections. Recent reviews and meta-analysis indicate that Ivermectin and COVID-19 a report in Antiviral Research, widespread interest often incorrectly describe the drug as a treatment or cure for COVID-19.

Ivermectin proved to be even more of a 'Wonder drug' in human health, improving the nutrition, general health and wellbeing of billions of people worldwide ever since it was first used in COVID-19.

Can humans take ivermectin

Ivermectin has continually proved to be astonishingly safe for human use. Indeed, it is such a safe drug, with minimal side effects,

that it can be administered by non-medical staff and even illiterate individuals in remote rural communities, provided that they have had some very basic, appropriate training.

Ivermectin side effects

- Tiredness
- Loss of energy
- Stomach pain
- Loss of appetite
- Nausea
- Vomiting
- Diarrhea
- Dizziness

How long does ivermectin stay in your system

Ivermectin is metabolized in the liver, and ivermectin and/or its metabolites are excreted almost exclusively in the feces over an estimated 12 days, with less than 1% of the administered dose excreted in the urine. The plasma half-life of ivermectin in man is approximately 18 hours following oral administration.

How dangerous is Ivermectin

Over 300 million people take ivermectin each year. To date, ivermectin has been shown to be a safe and well-tolerated drug. Most adverse reactions are mild and temporary, such as loss of appetite, headache and muscle aches, lack of energy, and fever.

How often should you take ivermectin

Ivermectin is best taken as a single dose with a full glass (8 ounces) of water on an empty stomach (1 hour before breakfast), unless otherwise directed by your doctor. To help clear up your infection, take ivermectin exactly as directed. Your doctor may want you to take another dose every 3 to 12 months.

Can ivermectin cause liver damage

Ivermectin is usually well tolerated and the liver injury reported with its use has been mild and self-limited in course. Ivermectin has not been associated with acute liver failure or chronic liver injury.

Why is ivermectin taken on an empty stomach

Take ivermectin on an empty stomach, at least 1 hour before or 2 hours after a meal. If you have a weak immune system (caused by disease or by using certain medicine), you may need to take more than one dose of ivermectin. Some people who have a weak immune system need to take this medicine on a regular basis.

Can you take too much ivermectin

If you take too much: This is not likely because in many cases, you'll take this drug one time only, as a single dose. However, if you take too much or your dose is too high, you could have dangerous levels of this drug in your body. Symptoms of an overdose of this drug can include: skin rash or itching.

Clinical trial

Ivermectin, a drug used to treat parasitic worm infections and now will be used for covid19 interacts with the human innate immune system and that this contributes to its anti-parasitic effects and anti-viral effect.

Arms and Interventions

Ivermectin will be administered once at 150mcg/kg, orally.

The Number of Cytokines Showing Statistically Significant Changes from Pre-treatment Levels

Ages Eligible for Study: 3 Years to 90 Years (Adult, Older Adult)
Sexes Eligible for Study: All
Accepts Healthy Volunteers: Yes

Will be Recorded before and after administration of Ivermectin.

Eligibility Criteria

Criteria

- Inclusion Criteria:
 - Weight over 110 pounds and under 185 pounds

Exclusion Criteria:

- Pregnancy or nursing mothers.
- Immunosuppressed individuals.
- Hypersensitivity to ivermectin, cellulose, starch, magnesium stearate, butylated hydroxyanisole, or citric acid powder (inert ingredients of Stromectol).
- Recent (last 3 years) travel to West or Central Africa, or any other country where onchocerciasis is present
- Hepatitis/HIV
- Currently taking warfarin
- Lactose intolerance (Lactose present in placebo)
- Currently taking Steroid medications (inhaled, oral or injection)
- Currently taking Barbiturates, Benzodiazepines such as Xanax or Klonopin, Valproic acid (Lithium), Calcium channel blockers, Statins (cholesterol medication)
- Liver or renal dysfunction

My Objectives: I found if Ivermectin suppresses replication of virus within few hours of administration of the drug without any side effects why not given for a long period of time as given in other parasitic infections.

1. Dose: Ivermectin(IVERCID):For Treatment I Used to give For More than 12 Years 12mg twice daily X 7Days one hour after Lunch dinner with one glass of Water. Miraculous result with Ivermectin.(NO ALCOHOL)

For 4-12 Years child 6mg Ivermectin (IVERCID) Twice daily X 7Days one hour after Lunch dinner with one glass of Water Lunch and Dinner.

For Prophylaxis: 12mg once daily one hour after Dinner with Half glass waterX4Days

2. Dexamethasone: of conditions for its anti-inflammatory and immunosuppressant effects. Impressive results of the RECOVERY trial established that a moderate dose of dexamethasone (6 mg

daily for 10 days) reduced mortality. Dexamethasone can be beneficial in patients with COVID-19 because of its ability to inhibit the generation of cytokines and reduce their destructive effects

3. Oxygen:An oxygen-rich environment may disrupt virus replication

Oxygen supplementation can improve antiviral immune response. In my case when saO2 decreases less than 92%.Then I used to give Oxygen 3-6Litres/Minutes.

4. Antibiotic Cover: I used to Prefer Inj Ceftriaxone 1Gm IV Once daily X 5Days

5. Immune Booster: Vitamin C+Zinc+D3(VIROZINC)one tablet daily X1-2Months

With my treatment no Death occurs till now. I used to keep all patient in Home quarantine.

Discussion

From May 2020 I started My work with 51 cases Covid19 Positive cases with Ivermectin with above dose I was successful. Even one case was 72 years,IHD,with Pacemaker with saO2 60% with Oxygen, Ivermectin 12mg stable within 12 hours. I and all my staffs have taken Ivermectin 12 mg daily for four days. We all are alright.Study is going on. I claimed Ivermectin is Real Treatment and Preventive drug for Covid19.Lastly all patients with little shortness of breath immediate starting with(1)Ing Primacort plus inj Deriphylline IV (2)Ivermectin 12 mg(3)Inj Ceftriaxone(4) Dexamethasone 6 mg orally(5)Oxygen. Within 2 hrs Patients become alright.Within 7 days no complications. In my research I do not find any death report yet.”

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