IMA Public Health Committee - January 10, 2022

Medical community objects to promotion of ivermectin for prevention or treatment of COVID-19

Summary of concerns with ivermectin as prevention or a treatment for COVID-19:

1. There are not any high-quality studies available to support the use of ivermectin to prevent or treat COVID-19. If ivermectin was a prevention or cure for COVID-19, health care professionals would be its biggest proponents.
2. The studies that first suggested ivermectin might have a beneficial effect were conducted in a lab test tube, but to replicate the same antiviral effect in humans would require an excessive and toxic amount of ivermectin.
3. The medical community is open to ivermectin if future clinical trials prove effective against COVID-19. Results from a large NIH trial on ivermectin will be available for review by March of 2022.
4. Ivermectin is not an alternative to proven treatments for COVID-19. If the best available treatment options are not utilized, this may result in worse patient outcomes.
5. Individuals have turned to alternative outlets to purchase ivermectin because most physicians and pharmacists do not feel comfortable giving patients ivermectin to prevent or treat COVID-19. Often, patients will turn to veterinary supply stores to get ivermectin. These products are intended to treat animals at much higher doses, which can be toxic and dangerous to humans.
6. Leading health agencies, including the Food and Drug Administration, the National Institutes of Health, the World Health Organization, the Center for Disease Control and Prevention, the American Medical Association, the Infectious Diseases Society of America, and the American Academy of Clinical Toxicology, have all recommended against using ivermectin to prevent or treat COVID-19 outside of clinical trials.
7. Even Merck, the manufacturer of ivermectin who would financially benefit from the widespread use of ivermectin, has stated ivermectin is not effective in treating COVID-19.

Frequently asked questions:

1. **There are doctors claiming that they have treated hundreds of patients with ivermectin who have all done well. Why isn't this good enough evidence for the use of ivermectin?**

These claims are called anecdotes and they are not strong enough for us to make medical decisions based on them. As an example, if a doctor told 100 friends to eat 10 M&Ms a day and they did so and none of them ended up hospitalized with COVID-19, we should not jump to the conclusion that M&Ms prevent severe disease. The medical community relies on high-quality studies and data to make treatment decisions for patients.

2. **What is the harm in taking ivermectin?**

While most people would probably tolerate prescription strength ivermectin, like all medications, some will experience adverse reactions. With no high-quality studies available to prove its effectiveness, the larger harm that ivermectin poses is giving patients a false sense of protection from COVID-19. People taking ivermectin might not take appropriate safety measures against COVID-19 because they assume that they are protected, which could result in mild or severe illness. In addition, this potentially false sense of protection could prevent people from getting COVID-19 vaccines which are proven to help prevent the disease. One doctor who touts the benefits of ivermectin got infected with COVID-19 and indicated that it was likely because he missed a couple of doses of the medication while traveling. If missing just a couple of doses of ivermectin can lead to infection, how practical of a solution is ivermectin compared to getting vaccinated? If you must continue taking ivermectin for years to prevent infection, that will add up in costs for a medication that has no evidence of benefit. We also do not know the long-term adverse effects of ivermectin, since ivermectin is intended for short courses of treatment of certain conditions.

3. **What are potential harmful side effects of taking Ivermectin?**

Dangerous side effect include:

- Confusion
- Loss of control of body movements (ataxia)
- Weakness
- Low blood pressure (hypotension)
- Seizures
- Gastrointestinal distress (nausea, vomiting, diarrhea)
- Dizziness
- Visual symptoms
- Rash (itching, hives)
- Coma and death

4. **Is it true that Merck has repackaged Ivermectin as Molnupiravir?**

No, the two drugs are not the same and have a "dissimilar" chemistry. Click HERE for more information on this issue.

Additional explanation of concerns:

The primary reason that we do not support the treatment of people with ivermectin for COVID-19 is that we have no high-quality studies that point to its benefit in either preventing or treating COVID-19. We evaluate studies to determine whether they are high-quality and peer reviewed before we trust them. Peer review is a rigorous process in which experts in the field review all aspects of the study. Major concerns exist in most of the studies that those who advocate for ivermectin base their recommendation upon. For a summary of the better-designed clinical trials and an explanation of their findings and limitations, see https://www.covid19treatmentguidelines.nih.gov/tables/ivermectin-data/.

The scientific and medical community want the COVID-19 pandemic to end just as much, and likely more than you do. Not only have we been subjected to the same limitations on our own social activities as you have, but we have been caring for COVID-19 patients for almost two years now, under some of the most difficult of circumstances. If there was a magic pill that would prevent and treat COVID-19 and prevent our hospitals from being overwhelmed, believe us, we would be the first ones championing it, promoting it to the public, prescribing it to our patients and taking it ourselves.

Much of the excitement about a potential therapeutic benefit for ivermectin comes from studies showing an antiviral effect of ivermectin in a test tube. Test tube results led to enthusiasm for the possible benefit of ivermectin to treat many other viruses in the past as well such as the viruses that cause HIV/AIDS, dengue fever, Zika, and yellow fever. Given that many poor countries struggle with these diseases, the potential for an inexpensive pill to treat these infections was very exciting. The problem is that the benefits we see in the test tube did not occur in humans in clinical trials, and so far, we have not seen those benefits against the virus that causes COVID-19, either. It is not uncommon for benefits that we see in a laboratory to not occur when we test those treatments in humans. That is why the FDA never approves medications simply based on laboratory tests. There must be clinical trials involving humans to ensure that those treatments are safe when given to humans (you wouldn't see adverse effects in test tube studies) and that they actually do provide a measurable benefit when given to humans. The interactions of medications with the human body including all its fluids, cells and organs can seldom be predicted in a test tube. In the case of ivermectin, one problem seems to be that the level of ivermectin needed to get the antiviral effect we see in the test tube cannot be attained in human cells without excessive doses and excessive toxicity.

We aren't saying that ivermectin should not be considered as a therapeutic option. We are saying that (1) it should be tried in the setting of well-designed clinical trials so that we can determine once and for all whether it has a benefit and (2) given there is no high-quality evidence to suggest benefit in either preventing or treating COVID-19, it is not responsible for those prescribing it to suggest to patients that they can rely on this drug instead of public health measures and therapeutics that are proven to help prevent or treat COVID-19.