

New Strategy for Preventing COVID-19

The Situation

Our nation currently has two strategic approaches to combat COVID-19. We encourage behaviors that will keep the virus from ever reaching our susceptible orifices. And we endeavor to manage the disease if and when it becomes established within its host. The former has run into compliance problems. The latter suffers from suboptimal treatment options. We are fervently hoping for a vaccine in the not-too-distant future. But there is no guarantee of its efficacy nor of how long lasting it will be. Plus, it will be challenging to vaccinate our nation's entire population before well into 2021. We need to mitigate the disastrous effect of this disease *now*.

The Strategy

Why not add a third approach? Attack this formidable enemy when it is still on the outskirts of those body locations where it would be able to do its most severe damage. Wipe it out when it first gets into our mouth or nose.

Imagine if people potentially exposed to SARS-CoV-2 cleaned out their throat and nose following that exposure, long before the virus had time to extensively invade the healthy cells there and then proliferate further into the body. Wouldn't it make sense to evaluate potential methods for inactivating and/or removing the virus in the throat and nasal cavity, to determine if there is an intervention that would be effective in preventing COVID-19?

If we do discover something that works, people who are concerned they might have been exposed to the virus could prophylactically gargle with a mouthwash that has antiviral properties. They could also wipe the inside of their nose with a swab dipped in a nontoxic antiviral solution. Even if all the virus is not removed or inactivated, those actions will at least reduce the viral load – thus minimizing disease severity. It's also possible that a nontoxic virus-inactivating spray could be developed for both throat and nose. In any case, let's neutralize the enemy before it gets traction within our bodies. Perhaps this throat-and-nose cleaning (TANC) should even become a daily hygiene routine. Desperate times call for desperate measures in this grave new world.

The Evidence

An article recently published in *Nature*, <https://www.nature.com/articles/s41598-018-37703-3>, found that hypertonic saline nasal irrigation and gargling significantly reduced the duration of the common cold, including colds caused by coronavirus, if begun within 48 hours after symptom onset.

Scientists at the University of North Carolina have discovered how the novel coronavirus moves through our respiratory system to ultimately do its damage to our lungs: <https://www.unc.edu/posts/2020/06/08/researchers-map-how-coronavirus-infection-travels-through-cells-of-nasal-cavity-and-respiratory-tract/>. UNC determined that “SARS-CoV-2 — the coronavirus that causes COVID-19 — infects the nasal cavity to a great degree by replicating specific cell types, and infects and replicates progressively less well in cells lower down the respiratory tract, including in the lungs. *The findings suggest the virus tends to become firmly established first in the nasal cavity. Then, in some cases, the virus is aspirated into the lungs where it may cause more serious disease, including potentially fatal pneumonia.*”

The Conclusion

Given the modest positive effect of gargling and nasal irrigation as a common-cold treatment even *after* symptoms occurred – along with the UNC determination of where SARS-CoV-2 establishes its beachhead – this all seems to suggest that if TANC was implemented soon after exposure to the coronavirus, the impact could be profoundly salutary. Thus, it seems to be imperative that this potential new strategy for preventing COVID-19 be rapidly and rigorously evaluated, including determination of the most effective, safe substances to utilize for TANC.