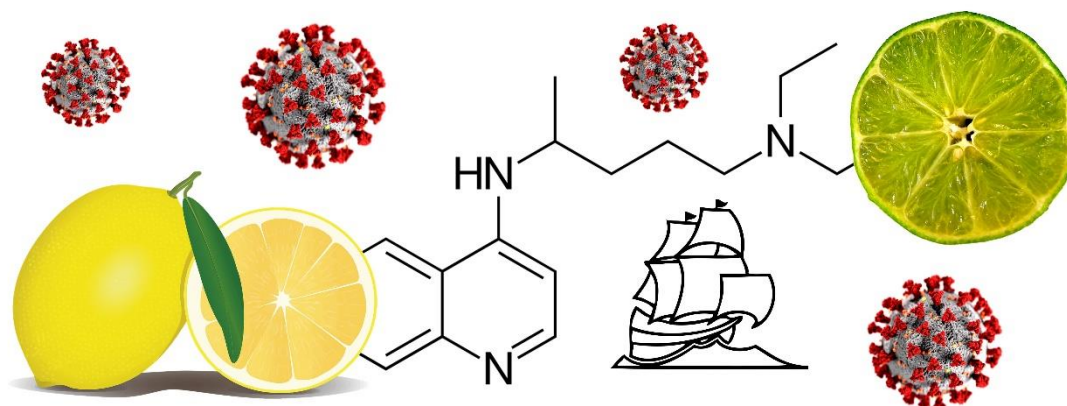


Scurvy, Hydroxychloroquine and Lemons

Shôn Ellerton, August 28, 2020

What do lemons and hydroxychloroquine have in common? More than you think!



I was thinking about this the other day. What do lemons and hydroxychloroquine (HCQ) have in common? And I was thinking. That's it. They are both potential preventative treatments based on less than conclusive and peer-reviewed research to diseases not particularly well-understood in the past or the present. Without widely accepted peer-reviewed and conclusive research, HCQ is the controversial drug which some claim to be effective against COVID-19 whilst others claim it to be mere quackery without any evidence of it working.

The use of lemons was controversial from the late 1500s up to the late 1700s in the prevention for scurvy despite many long-distance sea captains advocating its use. One notable example is an Elizabethan trader by the name of James Lancaster who carried lemons on his flagship *Red Dragon* during his long sea voyages to Brazil and the East Indies claiming that lemons worked against scurvy. These voyages took place in the late 1500s, about two hundred years before it was proven that the ascorbic acid component (vitamin C) in citrus fruits or other food stuffs containing it prevented scurvy.

If you are not familiar with scurvy, it is a debilitating condition in which one becomes weak, succumbs to gum disease, sore arms and legs, to the point that bleeding from the skin occurs followed by, usually, fatal results through infection. Bill Bryson writes about scurvy in some detail and alacrity in his great book, [*At Home: A Short History of Private Life*](#). Bryson makes the point that proponents of taking in citrus fruits and its efficacy on preventing scurvy

was not seriously taken by the medical establishment and the Royal Navy for nearly two hundred years until James Lind wrote his *Treatise of the Scurvy* in 1753. Even then it was subject to ridicule by the established physicians of the day claiming that it was not properly peer-reviewed and conducted through poor research. Just over a decade before James Lind's paper, a man by the name of William Stark, an English physician, experimented on himself by abstaining from any foods containing vitamin C, notably that of cheese, bread and water. He maintained to be healthy but after eight months or so, his condition very quickly deteriorated and he, unfortunately, died. It so happens that the effects of scurvy come very quick; although, partaking in vitamin C very quickly reverses those effects, it was discovered a little later. In those two hundred years before it was acknowledged that scurvy could be prevented by the consumption of vitamin C, approximately two million people died of scurvy.

HCQ has made its way into the press, predominantly in a negative light, with critics stating that there is no real evidence that it can help those with COVID-19. However, there are others in the international community, many of whom are trained as physicians who believe that HCQ has positive benefits in the prevention of COVID-19. I am not proclaiming that either is right or wrong, but simply to state that a myriad of viewpoints on the efficacy of HCQ exists. HCQ has been, of course, further demonised by many simply because Trump sanctioned its use over livestream TV and social media platforms. With Trump being branded as one of the most hated figures, through mass coercion of media sensation, HCQ has become the black sheep of medicinal cures. Extraordinary efforts have been put in place to quash or censor any social media post pertaining to HCQ being put forward as a possible remedy for COVID-19. The subject may be so much in contention that this very article could be under the scrutiny of the cancel culture crowd. So many have also succumbed to the narrative that any post discussing any benefits that HCQ could deliver is pure hogwash and should be dismissed. After all, if the WHO has not sanctioned the use of HCQ as a possible alternative to alleviating the symptoms of COVID-19, then, it must be believed. Right?

Now interestingly enough, the states of Minnesota and Ohio have, as quietly as possible, reversed their decisions to ban prescriptions of HCQ. Anyone who ventures outside of mainstream media will soon come across this news of course. Extraordinarily so, there have been cases in which pharmacists have not honoured doctor's prescriptions of HCQ. One must wonder as to what kind of

authority the pharmacists wield with respect to denying the prescription of HCQ through a doctor's prescription. It is totally barmy and absurd. However, saying that, *if* there is a shortage of HCQ and there are lupus or malaria patients who genuinely need it, then there may be logic in triaging the dispensing of HCQ appropriately.

Mainstream news reports in the media will explain just how dangerous HCQ really is. Sure. Anything taken in excess could be dangerous but HCQ has been with us for quite some time and the dangers are, in fact, very low. Since the 50s, HCQ has been put to good use with malaria treatment, some forms of arthritis, and, of course, lupus. I highly doubt that this drug would be prescribed and administered by the medical profession if it is deemed dangerous. Moreover, the cost of HCQ is many times fold cheaper than some of the other medicines which are currently being used to alleviate the effects of COVID-19 including Remdesivir, Favipiravir and many other drugs as outlined in the Australian Commission on Safety and Quality in Health Care report on [*Potential medicines to treat COVID-19*](#). HCQ, incidentally, is discussed in this report as a potential remedy but it is made clear that tests have not been conclusive as to its efficacy in battling against the virus. However, to deny someone on a hospital bed suffering from the symptoms of COVID-19 the right of using HCQ to make an improvement in their conditions is downright wrong.

Now back to scurvy. Let us go back to the 16th century. Fascinatingly so, most physicians dismissed the notion that the consumption of oranges and lemons had any effect in scurvy. In fact, the dogma of the time for physicians was to rely on ancient theories and, frankly, useless polypharmacy. During the 17th century in 1620, the *Mayflower* lost half of its crew from scurvy despite reports from almost fifty years ago that oranges and lemons can eliminate scurvy. For many, these reports were not substantiated and were considered fringe medicine, or worse, just quackery. An even more damning report can be found by recounting the voyages undertaken by the Spanish and the English during the mid-eighteenth century, not long before Lind's treatise on scurvy. The Spanish were using oranges and lemons to prevent the onset of scurvy; however, the English were still seeking advice from the College of Physicians who, extraordinarily still rejected the official use of citrus fruits but relied on bizarre potions like elixir of vitriol (sulphuric acid, alcohol, sugar and spices), which, of course, did not good whatsoever. I cannot help but recollect some of the advice given by Neil Ferguson and the Imperial of London on COVID-19, which went

so horribly wrong when Ferguson breached his own national advice of locking down, including that of Dominic Cummings who did exactly the same and seriously undermined the confidence of the British people and its trust with its government.

I see many parallels of what had occurred in the history of scurvy and what is happening to us now with HCQ. It is possible that HCQ has absolutely no benefits whatsoever in alleviating the symptoms of COVID-19, but there *are* reports from trained doctors or those working in medical establishments that HCQ has been beneficial. Unfortunately, at this stage, there appears to be no conclusive evidence that HCQ can prevent COVID-19; however, we must not forget that it is sometimes those rare findings, once considered quackery like in the case of consuming lemons, which may direct us to the answer we are looking for. Time will tell.