

On therapeutics

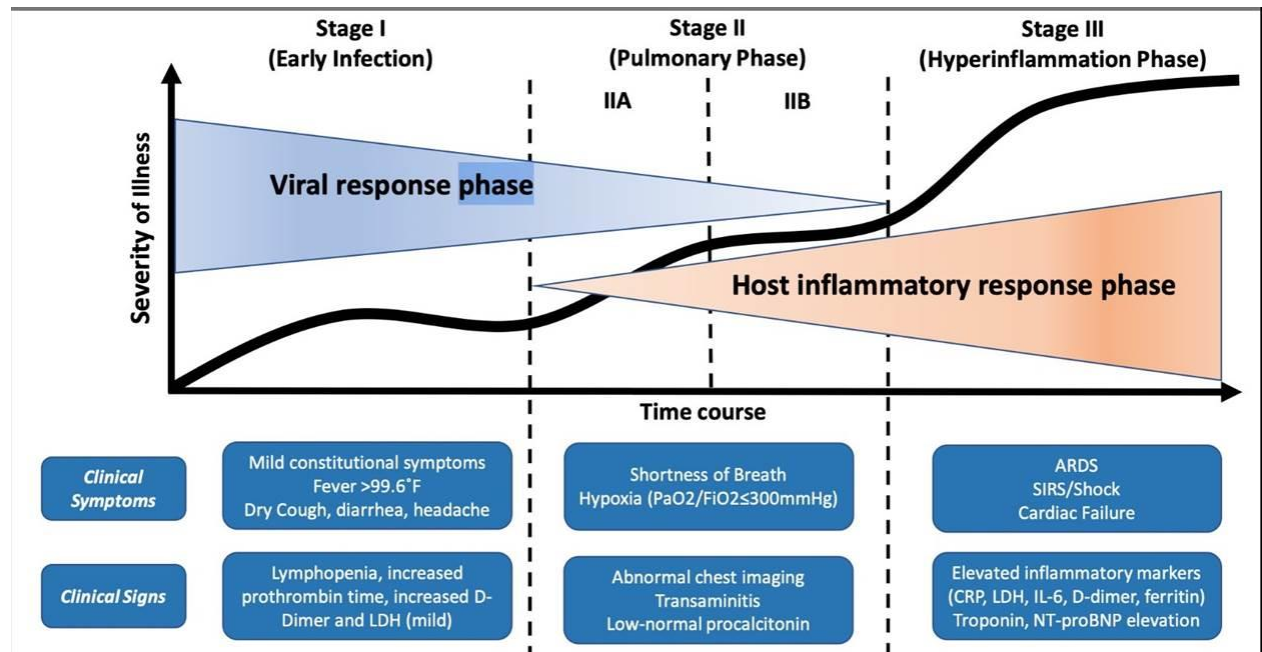
A lot is going on in the media in the past few days on “cures” and the potential of certain meds, in particular hydroxychloroquine (as a combo with Azithromcin) as an effective therapeutic agent for SARS-CoV2. This culminated in Mr. Trump tweeting about the combo as the miracle drug coming from France! The result was that people in many countries around the world (countries where no prescription is needed) rushed to pharmacies, and I have heard of reports from Brazil, Peru, Lebanon, and other countries, where pharmacies ran out of hydroxychloroquine today and people started taking it prophylactically!

It is very important to know that the evidence is still lacking and the study that is often cited by the media (Gautret et al) from Marseille, France, is severely flawed in many aspects. The study is still in pre-print which means it hasn't been peer reviewed yet. The sample size was very small, and only 6 patients received double therapy, the study was not randomized, there's very little info on patients' characteristics and clinical conditions, they mention 6 lost to follow up in their calculations while in reality out of these 3 went to ICU, one died and one discontinued due to side effects.

There are other studies starting to come out from China now on Hydroxychloroquine and other drugs but the evidence is still not convincing. In summary, although we need to take any data now into consideration (with a grain of salt), caution is still needed to critically appraise everything coming in.

To this end, INESSS issued this [statement](#) today

More importantly, we still need evidence on which patients will benefit most from these drugs (and other drugs being now investigated for repurposing), and at what stage of the illness. Knowledge about the immune response and stages of the infection is important to understand which drugs could be used at different stages.



From Siddiqui HK, Mehra MR. COVID-19 Illness in Native and Immunosuppressed States: A Clinical/Therapeutic Staging Proposal. *Journal of Heart and Lung Transplantation*. doi:

One theory that I heard today is that hydroxychloroquine, as an immune modulator and immune suppressant could possibly lead to a higher infection rate if given in the early phase and is maybe more useful in the second/third phase. This claim is to yet be validated

The next Digest will focus on the immune response and immunosuppressed patients.

COVID-19 and the liver

The largest study on COVID-19 to date showed that the prevalence of elevated aminotransferases and bilirubin in people faring worst was at least double that of others. Although clinically significant liver dysfunction was not quantified, this and other studies have led some to suggest that this finding might present clinical challenges. Close inspection of the available data supports a higher prevalence of abnormal aminotransferase levels in severe COVID-19 disease, but these studies actually suggest that clinically significant liver injury is uncommon, even when data for the most severely ill patients are selected. [Read more](#)

Prolonged presence of SARS-CoV-2 viral RNA in faecal samples

Data suggest the possibility of extended duration of viral shedding in faeces, for nearly 5 weeks after the patients' respiratory samples tested negative for SARS-CoV-2 RNA. which could possible lead to faecal-oral transmission, as seen with severe acute respiratory virus CoV and Middle East respiratory syndrome CoV. Further research into the viability and infectivity of SARS-CoV-2 in faeces is required.

Digestive symptoms could be tied to worse COVID-19 outcomes according to this [new study](#) published at the American Journal of Gastroenterology (small sample size, no testing for SARS-CoV-2 RNA in stool). One caveat is that the authors include anorexia (a non-specific symptom) with the cluster of digestive symptoms.

The authors conclude, "Clinicians should recognize that digestive symptoms, such as diarrhea, may be a presenting feature of COVID-19, and that the index of suspicion may need to be raised earlier in at-risk patients presenting with digestive symptoms rather than waiting for respiratory symptoms to emerge."

More on Pediatric COVID-19

This observational [study](#) included 8 severe or critically ill patients with COVID-19 who were treated at the pediatric Intensive Care Unit (ICU) and aimed to assess clinical features of COVID-19 in this age group.

The onset age of the eight patients ranged from 2 months to 15 years; six were boys. The most common symptoms were **polypnea** (8/8), followed by fever (6/8) and cough (6/8). Chest imaging showed multiple patch-like shadows in seven patients and ground-glass opacity in six. Laboratory findings revealed normal or increased whole blood counts (7/8), increased C-reactive protein, procalcitonin and lactate dehydrogenase (6/8), and abnormal liver function (4/8). Other findings included decreased CD16 + CD56 (4/8) and Th/Ts*(1/8), increased CD3 (2/8), CD4 (4/8) and CD8 (1/8), IL-6 (2/8), IL-10 (5/8) and IFN-gamma (2/8).

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