



# COVID-19: thoughts at sunrise

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Dear Sir,

I wrote this letter-to-the-Editor being one of the nearly 1,500,000 physicians involved, especially in these demanding times, in the clinical activity of Internal Medicine. It is addressed to the many people asking them professional advice in the present emergency due to the SARS-CoV-2 pandemics. I decided to submit this letter to a Journal that is read, or should be read, by many Family Doctors. I believe I am entitled to do it leaving aside, for a while, the “scientific evidence” to turn to the knowledge acquired in over 65 years of clinical practice. This put me in the position of providing suggestions to those who approached me during dozens of mainly flu epidemics. I would like to make clear, however, that I am not at all intending to provide formal recommendations on what should be done in the currently raging COVID-19 spread. This is the task for experts who are trying worldwide to identify the best treatment to resolve even the most severe cases, once a correct diagnosis is made.

I am worried about the kind of information provided to Practitioners through the most popular media by various categories of scientists asked to give advice about the treatments that should be instituted in the current emergency. Well, we are all looking for what to do right now, and we can certainly say that knowledge is still relatively poor. I would like, however, to draw the attention to what happened during the past winter season during which many Italians, in addition to COVID-19, have been affected by an acute-onset flu syndrome whose clinical manifestations are frequently even more relevant than those seen in the first phase of SARS-CoV-2 infection. In these cases, patients are advised not to go out, even to reach the physician or the hospital emergency department. Instead, they should follow the advice provided

by telephone by Family Doctors, who, in most instances, suggest the use of the sole paracetamol. This drug is certainly useful, but is often abused and this may lead to even severe side effects [1]. Moreover, for a few days, it has been suggested to make a swab. Why not to suggest, in the meantime, what can be useful to resolve or attenuate the most severe symptoms, particularly in those subjects affected by comorbidities?

It is well known that viral diseases should not be treated with antibiotics. However, broad-spectrum antibiotics could help in fighting, even rapidly, bacterial overlaps [2], not so infrequent in immune-deficient subjects infected with a virus, which in itself may further weaken their immune response. Furthermore, why not immediately say that corticosteroids, the correct use of which is beneficial to millions of patients, are available to resolve severe and dangerous symptoms related not only to lung disease, but also to disorders affecting the gastro-intestinal tract, kidneys, osteo-articular system, vascular system, meningo-encephalic territory, and to which we often resort because they help us decisively? Then let us speak out, as the use of steroids and antibiotics is recommended by several guidelines and, above all, many physicians use them. Let us keep them as a supply that can be life-saving, avoiding to demonize them, but inviting Family Doctors (who should be able to evaluate the clinical picture in a direct way) to consider how and when to prescribe these drugs.

It could be argued that there are several pieces of evidence showing that the excessive and inadequate use of antibiotics leads to microbial resistance [3], as well as it could be contested that several studies demonstrated that steroid administration do not improve the course of these viral diseases [4]. I am well aware of them, as I also conducted research activity in these fields and taught this matter to students and residents. Nevertheless, I think that it can be declared that a lot of information in this field is still missing, not so much concerning full recovery, but, mainly, related to their effect in improving the clinical picture, with many subsequent therapeutic benefits. For example, we should consider that corticosteroids possess an incomparable

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anti-inflammatory activity [5], and carry very little risk in the short-term administration as compared with other anti-inflammatory drugs, and also directly inhibit the expression of interleukin-6 and its receptor. Other drugs exert the latter effect, but are very expensive and possibly more risky over time and in specific associated conditions.

These were the thoughts that prompted me to write this letter, particularly after hearing, a few days ago on television, the tale of a representative of Family Doctors. She was asked to report her advice to a patient who had phoned because of hyperthermia. She had replied: paracetamol, repeating the same prescription after three and more days, without any other suggestion, until she decided to recommend the patient to reach the hospital emergency department. Just think about what could happen, for example at the heart level, to an elderly patient who, in the presence of pneumonia whatever its etiology, waits for the result of the swab instead of being treated for an impending acute respiratory failure. Moreover, in the light of pathological findings suggesting lung injury due to microembolism and/or microvascular thrombosis, why not consider low molecular weight heparin administration? Possibly, is not this a reason why elderly, but even young, patients carrying multi-organic dysfunctions have ultimately died?

In conclusion, let us leave to scientists all over the world to develop an effective vaccine, which certainly would not be immediately useful in these days of raging pandemics, and, above all, the identification of biological drugs succeeding in blocking viral replication, especially in the prodromal and oligo-symptomatic phase of the disease. We should mainly care about what can be done in the second phase, when symptoms can indicate the way forward to prevent the third one, where full-blown complications require all the incomparable expertise of intensivists, to whom any necessary materials and equipment must be provided.

## Compliance with ethical standards

**Conflict of interest** The authors declare that they no conflict of interest.

**Statement of human and animal rights** This article does not contain any studies with human participants or animals performed by any of the authors.

**Informed consent** None.

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