

Letter to the Editor

Friends and enemies of humans and viruses

Dear Editor,

Worldwide, to today 13 August 2020, almost 21 million people have fallen ill with COVID-19 and about 756,000 have died (of which almost 5,000 yesterday). From 4 April 2020 to today, the daily number of victims has been less than 3,000 in just 3 days, with a maximum of almost 10,000 on 30 April. Furthermore, we all know that the numbers of both deaths and infected people have been greatly underestimated almost everywhere.

At the beginning of the pandemic, Italy was the second country, after China, for the number of infected people and the first one for the number of deaths. In Italy the maximum number of documented infections occurred on April, 20, 2020; then there was a progressive decrease in the numbers until the beginning of July when the number of new infections began to rise to be several hundred of new cases every day in recent days. Fortunately, for the moment, the number of deaths (16 in the last 48 hours) and the number of critically ill patients admitted to intensive care units (55 now) are being kept in a lower proportion.

Comments:

1. This second epidemic of COVID-19 in Italy is due to various factors: on the one hand, the gatherings and the lack of use of masks; on the other hand, the resumption of work and recreational activities (which are the job of other people), including international travel, holidays and youth parties, that governments have allowed to limit economic damage and avoid social anger.
2. This second cycle of the disease in Italy seems "for now" to be less aggressive than the first cycle was in Italy and the current disease is now in the world. If this low severity will be confirmed, it will not be due to an antibody-based herd immunity, as serological studies have shown that only about 1.5% of Italians have circulating anti-SARS-CoV-2 antibodies. Should this trend continue, it would be conceivable that, during the first Italian pandemic, some partially protective process was developed by the cell-mediated immunity system, as suggested by the article of Le Bert et al¹ on T cells memory and immunity.
3. In Zeno's paradox, the fast Achilles halves the distance from the tortoise several times, but never manages to reach it. So, when the pandemic will seem to be over, isolated cases of COVID-19 could smolder and then move and explode, giving new devastating outbreaks. The hope is that all governments ally themselves to limit travel, prohibit gatherings, properly locate, isolate and treat infected people and enforce the correct use of masks and hygiene while somehow saving the economy. But this won't be easy.

Conflict of Interest

The Authors declare that they have no conflict of interests.

Data Sources

<http://www.salute.gov.it/portale/home.html>
<https://coronavirus.jhu.edu/map.html>
<https://covid19.who.int>
<https://www.epicentro.iss.it/coronavirus>
<https://coronavirus.gimbe.org>
<https://www.iss.it/coronavirus>
<https://lab24.ilsole24ore.com/coronavirus/en>

References

- 1) LE BERT N, TAN AT, KUNASEGARAN K, THAM CYL, HAFEZI M, CHIA A, CHING MHY, LIN M, TAN N, LINSTER M, CHIA WN, CHEN MI, WANG LF, OOI EE, KALIMUDDIN S, TAMBYAH PA, LOW JG, TAN YJ, BERTOLETTI A. SARS-CoV-2-specific T cell immunity in cases of COVID-19 and SARS, and uninfected controls. *Nature* 2020; 584: 457-462.

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