LETTERS TO THE EDITOR

ANTIBIOTIC CONTROL IN TIMES OF COVID-19

CONTROL DE ANTIBIÓTICOS EN TIEMPOS DE COVID-19

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LETTERS TO THE EDITOR

Mr. Editor

During the COVID-19 pandemic, an increase in the use of antibiotics is probably one of the main reasons for the uncertainty regarding the therapeutic arsenal against SARS-CoV-2 and the discontinuity of antibiotic control programs[1].

According to the World Health Organization (WHO), infections by resistant germs cause at least 700,000 deaths a year worldwide. If the necessary measures are not taken in the future, deaths could increase to 10 million by the year. 2050[2].

In this context, there is evidence that antibiotics do not fight COVID-19, unless the patient has a proven bacterial co-infection. In a review study on bacterial or fungal coinfections in patients with COVID-19, it was found that 62/806 (8%) of patients presented some type of coinfection during hospital admission. A secondary analysis showed that 1450/2010 (72%) of patients received antibiotic therapy[3].

Another identified drawback is that the traditional markers used for the initiation and follow-up of antibiotic treatment, such as the number of leukocytes, C-reactive protein, or imaging studies, are also usually altered in SARS-CoV-2 infection[4,5]. For this reason, the use of procalcitonin is recommended[6,7], since, normally, viruses release interferon, which inhibits the release of procalcitonin[8]. However, a meta-analysis concluded that elevated procalcitonin levels were associated up to almost five times with an increased risk of severe COVID-19 (OR, 4.76; 95% CI, 2.74–8.29)[9]. Probably due to coinfections bacterial or, perhaps, by the intrinsic severity of COVID-19. However, in the early stages, procalcitonin has proven useful in detecting possible coinfections in adults and children with COVID-19[5,10].

What can we do to stop antibiotic resistance in times of pandemic? From the point of view of the Community view, it is necessary to promote handwashing and non-self-medication. In addition to secondary prevention, vaccination against pathogens causes respiratory infections, such as pneumococcus or influenza virus[2,11].

It is necessary to correctly use diagnostic tests and document possible bacterial co-infections at the hospital level, being necessary to perform the corresponding microbiological tests before starting the empirical antibiotic. In addition, the role of the intra-hospital infection committees must be recognized and strengthened, which constitutes an essential pillar in the management of antimicrobials[12].

In conclusion, resistance to antibiotics could increase during the COVID-19 pandemic. We must consider that the prevalence of bacterial coinfections in COVID-19 appears to be low. The use of antibiotics should be controlled in turn by the infection committee of each hospital. We must also consider the importance of implementing educational and preventive measures in the community.

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