

THE ROLE OF ANTIBACTERIAL THERAPY IN THE TREATMENT OF COVID-19

Shahboskhon Akhmedov,

Botir Keldiyorov,

Shoira Matrzaeva,

Shaxnoza Qo'chqarova,

Fattaxova Yuliya

Tashkent Medical Academy. Tashkent, Uzbekistan

Abstract

The aim of the work was to evaluate the frequency and nature of the prescription of antibiotics in hospitalized patients with confirmed COVID-19, as well as to determine the significance of various biomarkers for diagnosing a bacterial infection.

Materials and methods

A retrospective analysis of randomly selected hospital records of patients ($n = 190$) with confirmed COVID-19 was performed. 2 groups were formed: group 1 ($n = 30$) - patients with COVID-19 and exacerbation of chronic infectious diseases who underwent acute or elective surgery; 2nd group ($n = 160$) - persons with only manifestations of COVID-19.

Results

Upon admission to the hospital, ABPs were administered to almost all patients, except for 1 patient. The most commonly prescribed ABPs were macrolides (63.5%), respiratory fluoroquinolones (49.7%), and third or fourth generation cephalosporins (57.1%). Antibiotics were prescribed on the 1st day upon admission to the hospital, therapy continued until the moment of discharge. The range of ABPs used was slightly different in patients of both groups. Patients of the 2nd group were more often prescribed respiratory fluoroquinolones and less often - III-IV generation cephalosporins, while macrolides were used in the treatment regimens of patients in both groups. It was noted that the courses of respiratory fluoroquinolones received by patients of the 2nd group were longer compared to those in the 1st group ($p < 0.05$), while a trend towards longer macrolide therapy was established. In patients



with signs of a bacterial infection on admission, a more pronounced leukocytosis with a neutrophilic shift was observed, an increase in the erythrocyte sedimentation rate (ESR) > 20 mm/h was more common, and the level of procalcitonin increased > 0.5 ng/ml.

Conclusion

It was found that ABPs at the inpatient stage were prescribed to the vast majority of patients in the absence of clear indications. The most informative markers of a bacterial infection in patients with COVID-19 are leukocytosis with a neutrophilic shift, an increase in ESR > 20 mm/h, and a procalcitonin level > 0.5 ng/ml.

