

ORIGINAL ARTICLE

COVID-19 Pandemic: Challenges, Controversies and What we have Learned

Ileana CONSTANTINESCU^{1,2,3}, Ion MARUNTELU^{1,2}, Alexandra-Elena CONSTANTINESCU^{1,4}, Adriana TALANGESCU^{1,2}, Andreia-Ioana CONSTANTINESCU^{4,5}, Maria TIZU^{1,2}

¹Immunology and Transplant Immunology, Carol Davila University of Medicine and Pharmacy, 258 Fundeni Avenue, 022328 Bucharest, Romania

² Centre of Immunogenetics and Virology, Fundeni Clinical Institute, 258 Fundeni Avenue, 022328 Bucharest, Romania

³ Academy of Romanian Scientists (AOSR), 3 Ilfov Street, Sector 5, 022328 Bucharest, Romania

⁴ "Emil Palade" Center of Excellence for Young Researchers (EP-CEYR), Romanian Academy of Scientists (AOSR)

⁵ Faculty of Medicine of "Titu Maiorescu" University of Bucharest, Str. Gheorghe Petraşcu no.67A, 031595, Bucharest, Romania

Correspondence to: Ileana Constantinescu, Immunology and Transplant Immunology, Carol Davila University of Medicine and Pharmacy, 258 Fundeni Avenue, 022328 Bucharest, Romania; Centre of Immunogenetics and Virology, Fundeni Clinical Institute, 258 Fundeni Avenue, 022328 Bucharest, Romania; e-mail: ileana.constantinescu@imunogenetica.ro

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Abstract. Introduction: The COVID-19 pandemic put us in a very difficult situation and created a lot of challenges for both diagnostics and follow-up of patients with severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). We also had difficult problems understanding the virus-host interactions and the progression of the immune response. **Objectives:** We aimed to point out our experience in the diagnostics of SARS-CoV-2 in patients admitted to Fundeni Clinical Institute. We have also investigated the healthcare personnel in order to have some epidemiologic data about the transmission of the new coronavirus in our institute. **Methods:** Three different real-time reverse transcription-polymerase chain reaction (RT-PCR) assays were used to screen for the new coronavirus infection. The immunization rate against SARS-CoV-2 was detected by assessing the IgG antibodies in both patients and clinical staff. We have used the chemiluminescence method to assess the anti-SARS-CoV-2 IgG antibodies. **Results:** Most of the diagnosed patients with SARS-CoV-2 infections were admitted to the surgery wards for hematology and gastroenterology. Our data showed that all the diagnosed patients developed IgG antibodies against SARS-CoV-2, but we have noticed that the immunization against SARS-CoV-2 did not last. **Conclusions:** Our experience with the SARS-CoV-2 pandemic emphasized that molecular diagnostics by RT-PCR was essential, together with the study of IgG antibodies against SARS-CoV-2, thus enabling us to better interpret PCR test results.

Keywords: Covid-19, RT-PCR, SARS-CoV-2, IgG specific antibodies.

Abbreviations: