

A REVIEW STUDY ON COVID 19 AND DIARRHOEA

Dr.Ashok Kumar A Senior Resident¹,

Dr.Vellapandi Assistant Professor²

Meenakshi Academy of Higher Education and Research

ashokkumara@mmchri.ac.in

Abstract

The 2019 pandemic of Corona Virus disease (COVID-19), caused by extreme acute coronaviral syndrome 2 (SARS-CoV-2), exploded in 2020 and produced severe global socio-economic and public health challenges. A subset of patients were also diagnosed with diarrhoea as well as usual characteristics such as fever, toxin and dyspnea. However, there has been inadequate attention to the clinical characteristics and prognoses of COVID-19-associated diarrhoea¹⁻³. The analysis discusses the occurrence, pathogenesis, clinical characteristics, improvements in faecal viruses, forecasts and influences influential to diarrhoea associated with COVID-19. In patients with COVID-19, the occurrence of diarrhoea was registered between 2% and 49.5%. SARS-CoV-2 of ACE-2 expressing the small intestine epithelial cells, which causes local intestinal damages, was reported as the key cause of diarrhoea. This cell invasion may be a main factor in pharyngeal swab positive for the long duration of SARS-CoV-2 found in faeces. The related diarrhoea in these patients disrupts the bowel flora equilibrium and leads to a greater severity of diseases and a better forecast. Patients with positive fecal-nucleic acid testing and intestinal microflower diseases should be careful with COVID-19 induced diarrhoea, and design more appropriate prevention and care options for these patients.

Keywords: COVID19, DIARRHOEA, PANDEMIC

BACKGROUND

The 2019 Corona Virus Disease (COVID 19) is an infectious virus that spreads exponentially, primarily by means of breathing droplets and direct contact and is extremely contagious. The second week of March 2020 saw a world-wide outbreak as a pandemic and

within a few months the number of confirmed cases had risen to 4 million, including over 282,000 deaths^{4,5}. The COVID-19 pandemic not only endangered public wellbeing, the global economy and human lives around the world. Patients usually have fever, cough, sputum, dyspnea, headache and exhaustion. COVID-19 Extreme COVID-19 patients also need artificial ventilation and may suffer from acute syndrome of respiratory failure (ARDS). Any of COVID-19 patients suffered from diarrhoea; only gastrointestinal symptoms, such as diarrhoea, anorexia, nausea and vomiting showed small numbers. Diarrhea can be the first symptom of COVID-19, but diagnoses and nosocomial infections may be postponed due to lack of precision. Within two days of hospital admission, the first patient in the United States with COVID-19 had fever and cough and diarrhoea. Fecal tests of the virus have continued to be positive for the virus 30 days in patients in China that have been adversely infected by an extreme acute respiratory coronavirus (SARS-CoV-2) syndrome, so there could be a chance of fecal-oral transmission of the virus⁶⁻⁸.

SYMPTOMS OF COVID

The 2019 COVID (COVID-19) outbreak has arisen and has spread across the world due to a recent acute coronavirus syndrome (SARS-CoV-2). The major clinical appearance is acute febrile fever with pulmonary symptoms, as regards the clinical presentation of new coronavirus infections. Nevertheless, recent research found that the SARS-CoV-2 was found in urine, and endoscopic studies revealed COVID-19 ulcers associated with gastrointestinal fluid and bleeding in some cases. The bowel may be a more intuitive discovery in autopsy trials. Accumulated data is confirmed by the delivery of SARS-CoV-2 by the gastrointestinal tract and by the angiotensin transfer enzyme2 (ACE2). Indeed, in COVID-19 patients, gastrointestinal signs are not uncommon. Previous studies indicate gastro-intestinal effects (diarrhoea, vomiting and nausea) in about 2–10% of COVID-19 cases. In SARS-CoV-2 contaminated patients, gastrointestinal bleeding was also observed^{9,10}. No effective COVID-19 antiviral therapy is currently available. Key therapies are preventive treatment with further oxygen treatment and oxygenation of the extracorporeal membrane. The ultimate tool for the prevention of many infectious diseases was Convalescent Plasma (CP). CP infusion has expected to be prescribed for the treatment of SARS-CoV-2 and in some cases has also been checked during the COVID-19 outbreak. A major removal of the virus and lung infiltrate resolution in CP-treated patients have been shown by Ye et al. Zhang et al. confirmed a serious COVID-19 patient who had improved clinical condition in Nanjing after CP infusion. However, no records of healing gastrointestinal issues in COVID-19 patients have been

reported with convalescent plasma treatment. Therefore, we have two cases of repeat diarrhoea and healthy faecal occult blood patients with COVID-19 who have healed safely after the one-time recovery of plasma.

DISCUSSION

The worldwide rise of the latest coronavirus disease (COVID-20) is representative of the increasingly spreading dissemination of COVID-19 from person to person. The key transmission routes for the novel coronavirus are considered during the ongoing pandemic. While the first and forefront of symptoms are fever and respiratory signs, 2-18,1% of patients have gastrointestinal (GI) symptoms (i.e. diarrhoea)¹¹⁻¹⁴. Some patients have been indicated to be contaminated by examining the faecal samples collect, which indicates that there is a risk for fecal-oral transmission, with gastrointestinal signs with no other common signs of COVID-19 infection. The intestinal system may also be considered an alternate route for infection. Diarrhoea can increase a possible fecal-oral transmission but may well be ignored by health workers among the gastrointestinal symptoms in cases of COVID-19, including diarrhoea, nausea, vomiting, and abdominal pain. In this context, we performed a detailed analysis into the clinical characteristics, on the basis of our first-hand experience, of 90 COVID-19 patients with diarrhoea, to help their clinicians classify infected cases correctly and quickly¹⁵⁻¹⁸.

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