

## Guidelines for Assistance to Patients with Sickle Cell Disease in Front of Covid-19

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### OPINION

Severe acute respiratory syndrome coronavirus 2, also known as COVID -19, has spread to more than 212 countries with almost 3.28 million cases as April 2020 since first reported [1,2]. The clinical features of this disease are not completely understood, however severe illness is thought to predominantly occur in adults with advanced age and those with underlying comorbidities [3]. Sickle Cell Disease (SCD), an immunocompromised condition, puts patients at higher risk for respiratory infections and subsequent pulmonary complications such as Acute Chest Syndrome (ACS) [4]. In addition, they can evolve with damage to target organs over the years, with the development of heart, lung, neurological and kidney diseases [5].

Some report suggest that painful Vaso-Occlusive Crisis (VOC) and/or ACS could be triggered by COVID-19. Although it is necessary to wait for more experience in relation to the clinical presentation of COVID-19 in SCD, these important points need to be taken into account [5-7].

The experience in hematology and blood transfusion, which transforms administration practices excessively focused on procedures, norms and strategy into approaches based on results that determine the citizens' satisfaction, presents a challenge. The great difficulty in the quality of administration of a public service is to obtain effective results by decreasing or eliminating problems, or by adding benefits and values expected by society. The Fundação Hemominas, a public health institution, references in the treatment and follow-up of patients with SCD aware of the importance of its role as a service provider in a critical and vital area, elaborated strategies to meet a management system based on constitutional and institutional public values and quality principles with defined goals accompanied by a appraisal system. The Hemominas works as a network, with administration and technical coordination located in Belo Horizonte, Minas Gerais (Brazil). It has 23 regional units throughout the state of Minas Gerais, Brazil. Considering these facts, the Fundação Hemominas [8], developed this guidelines:

1. Social isolation : the patients should avoid contact with people with respiratory symptoms or fever
2. The patients should prioritize self-healing, wash their hands and hydrate themselves frequently

3. Patients should seek emergency medical services if they experience fever and symptoms respiratory (difficulty in breathing, persistent cough, nasal wing bleeding).
4. Must remember that Acute Chest Syndrome (ACS), a serious complication of sickle cell disease, may be triggered by respiratory infections, including COVID-19. In addition, infection by coronavirus can lead to hypoxemia, dehydration and metabolic acidosis, triggering vasoocclusive crisis, including ACS.
5. Maintain control medications such as folic acid, penicillin V, hydroxyurea and analgesics, except IBUPROFEN, as there is a report of worse evolution of COVID-19 after concomitant use of ibuprofen [9,10].
6. In case of doubts regarding the hematological patients characteristics, the Fundação Hemominas is available to discuss cases through a call center called Lig Minas 24 hours a day. The Fundação Hemominas seeks, through these strategic actions implemented during the pandemic, to minimize the impact of Covid 19 on the well-being of patients with sickle cell disease.

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