

Highlights on Asthma Management during COVID-19 Epidemic

Mais Yassin* and Yousser Mohammad

Department of Internal Medicine, Tishreen University, Lattakia, Syria

***Corresponding Author:** Mais Yassin, Department of Internal Medicine, Tishreen University, Lattakia, Syria.

Received: September 02, 2020; **Published:** October 07, 2020

What is COVID-19??

Coronavirus disease 2019 (covid-19) is officially a pandemic. It is defined as illness caused by a novel coronavirus now called severe acute respiratory syndrome coronavirus 2 (SARS-cov-2), which was first identified amid an outbreak of respiratory illness cases in Wuhan City, China, then quickly spreading throw out the city. It has reached at least 124 countries and territories. It was initially reported to the WHO on December 31, 2019. On January 30, 2020, the WHO declared the COVID-19 outbreak a global health emergency, on March 11, 2020, the WHO a global pandemic [1].

What is asthma??

Global initiative for asthma (GINA) definition: Asthma is a heterogeneous disease, usually characterized by chronic airway inflammation. It is defined by the history of respiratory symptoms such as wheeze, shortness of breath, chest tightness and cough that vary over-time and in intensity together with variable expiratory air flow limitation. Airflow limitation may later become persistent [2].

In this commentary article; we will reply to updated information for the following questions:

1. Are Asthma patients at high risk for COVID-19??
2. Does the management by corticosteroids of asthma increase the risk for COVID-19??
3. What is the COVID-19 guideline in asthma patients.

Unfortunately, patients who have lung disease and develop COVID-19 have worse outcomes when are hospitalized, with a case fatality rate of 6.3% compared to 2.3% overall in China [3].

Nice and CDC think that Asthma patients (moderate to severe) could be at greater risk to be affected by covid19 and for more severe disease, although asthma may increase the risk of hospitalization from COVID-19 [4,8,10,11].

NICE and GINA advise asthma patients to continue using their prescribed medications, including inhaled corticosteroids, to control asthma symptoms and reduce the risk of experiencing severe covid19 complications [2,4]. And there is some evidence to suggest that ICS use is associated with reduced expression of ACE-2, the Receptor of SARA-COV-2. GINA and Nice have the same position [6].

Not only that, but patients should continue taking oral corticosteroids (OCS) if prescribed for their severe asthma not responding to stage 4 of GINA or asthma exacerbations [2,4].

Severe asthma is defined as asthma requiring high-dose inhaled corticosteroids plus a second controller with or without systemic corticosteroids to prevent it from becoming uncontrolled or which remains uncontrolled despite this. In Severe asthma patients, treatment

Citation: Mais Yassin and Yousser Mohammad. "Highlights on Asthma Management during COVID-19 Epidemic". *EC Pulmonology and Respiratory Medicine* 9.11 (2020): 41-42.

with biological therapies should be continued. There is no evidence that biological therapies for asthma suppress the immune system and patients who usually attend hospital for treatment may be trained to self-administer or undergo treatment at a community clinic [4,10].

All asthma patients have to quit smoking to improve symptoms, lung function, reduce the risk of poor outcomes and risk of acute exacerbation. The harmful effects of smoking in asthma include worse asthma control, altered airway inflammation, corticosteroid insensitivity and increases the lung gene expression of ACE2 [7,9].

All patients have to follow their written asthma action plan in line [2,4].

Where possible we have to avoid spirometry in covid19 and also patients confirmed or suspected advising against the use of nebulizers due to the risk of transmitting SARS-COV-2 to other patients and to healthcare workers [2,4].

We have to follow infection control recommendations if other aerosol-generating procedures are needed such as oxygen therapy, sputum induction, manual ventilation, non-invasive ventilation and intubation.

Finally all asthma patients have to follow local health advice about hygiene strategies (wash hands regularly with soap and warm water or using an alcohol-based hand sanitizer) and use of personal protective equipment as new information becomes available in your country or region [2,4].

Bibliography

1. "Novel Coronavirus, Wuhan, China". CDC (2020).
2. Global Initiative for Asthma (GINA) Global strategy for asthma management and prevention (2020).
3. David MG Halpin, *et al.* "Inhaled corticosteroids and COVID-19; a systemic review and clinical perspective". *European Respiratory Journal* 55 (2020): 2001009.
4. COVID-19 rapid guideline: severe asthma, NICE guideline (2020).
5. Melissa Foster. "Asthma in certain patients elevates risk for worse COVID-19 outcomes". *The American Journal of Respiratory and Critical Care Medicine* (2020).
6. Tania Maes, *et al.* "COVID-19, Asthma, and Inhaled Corticosteroids (ICS): Another Beneficial Effect of ICS". By the American Thoracic Society (2020).
7. Riccardo Polosa and Neil C Thomson. "Smoking and Asthma: dangerous liaisons". *European Respiratory Journal* 41 (2013): 716-726.
8. Jamie Hartmann-Boyce. Coronavirus and asthma; what we know so far. University of Oxford (2020).
9. Cai G., *et al.* "Tobacco Smoking Increases the Lung Gene Expression of ACE2, the Receptor of SARS-COV-2". *American Journal of Respiratory and Critical Care Medicine* (2020).
10. COVID-19 rapid Nice guideline summary: Sever asthma. summary of Nice national guideline NG 166 (2020).
11. CDC. "Certain Medical Conditions and Risk for Severe COVID-19 Illness" (2020).

Volume 9 Issue 11 Novemberber 2020

©All rights reserved by Mais Yassin and Youssef Mohammad.