

COVID-19 and Asthma, Allergy, and Immune Deficiency Patients ACAAI Statement – 3-12-20

The recent pandemic outbreak of Coronavirus has created a good bit of uncertainty and anxiety among many of our patients. Elderly patients as well as patients with severe asthma, immunodeficiency and other chronic conditions where their immune system may be compromised are most susceptible to increased morbidity and mortality from viral infections in general, and we assume similar precautions should be recommended to these individuals for Coronavirus. As allergists, we should advise all of our patients, especially those with asthma, to remain on their medications. Specifically, asthma patients taking inhaled corticosteroids (ICS) should be advised to continue these medications as they have been shown to prevent or reduce asthma exacerbations in part by reducing ICAM-1 levels and/or acidic endosomes important for modulating airway inflammation associated with viral infections¹.

A recent study reported that ICS inhibit the Coronavirus strain, HCoV-229E, replication partly by inhibiting receptor expression and/or endosomal function thereby modulating infection-induced airway inflammation². To date 80% of cases are mild and self-limited, manifesting as fever, cough and shortness of breath. For now, we should remain calm and prudent on how we advise our patients.

If you have patients with severe asthma currently on a biologic therapy, there is no information at this time that these treatments should be stopped. These severe asthma patients are at an increased risk to COVID-19 infection and optimal control of their chronic condition is of utmost importance.

Detailed clinical investigation of 140 hospitalized COVID-19 cases in Wuhan China suggests eosinopenia together with lymphopenia may be a potential indicator for diagnosis. Allergic diseases, asthma, and COPD were not risk factors for COVID-19 infection. The authors found that older age, high number of comorbidities, and more prominent laboratory abnormalities were associated with severe patients.³

A joint statement on the current epidemics of new Coronavirus by the worlds' different primary immunodeficiency organizations has been published. Their recommendations for patients with primary immunodeficiencies (PID) state that currently no data pointing to whether PID patients are actually at higher risk of more severe disease from COVID-19. However, it is believed that PID patients might be at higher risk for this infection or a more severe course of the disease. Thus, patients with PID need to take extra care to prevent from getting this infection. Please see the whole statement for more information for your PID patients:

https://www.ceredih.fr/uploads/COVID19_WORLDWIDE_Joint_Statement_20200311_1200CET_FIN_AL.pdf

From Chinese data recently published in JAMA⁴, mortality rate seen:

- Under 60 years of age (less than 1%)
- 60-69 years of age (3.5%)
- 70-79 years of age (8%)

- Over 80 years of age (15%)

Allergists may consider intensive phone prescreening of acute visits to determine if patients have had fever for the past several weeks, potential exposure to COVID-19, or new onset cough. The patient can then be effectively triaged before arriving at office or even referred to an acute care clinic, emergency room or your local facility set up to handle potential COVID exposed patients if allergist does not feel that their office is prepared to safely treat the patient; while protecting other patients and staff in the office from the virus.

Reasonable healthcare recommendations for your asthma patients are: 1) Avoid close contact (6 feet) with people who are sick; 2) Avoid touching your eyes, nose, and mouth; 3) Wash your hands often with soap and water for at least 20 seconds; 4) Use an alcohol-based hand sanitizer that contains at least 60% alcohol if soap and water are not available; 5) Use tissues to cover coughs and sneezes, then discard tissue in the trash; 6) Clean/disinfect frequently touched objects and surfaces and 7) IF YOU ARE SICK, STAY AT HOME! For up to date information about the Coronavirus pandemic visit: www.cdc.gov/coronavirus/2019-ncov/

References

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