Allergic Diseases and Coronavirus Infection

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DESCRIPTION

Patients with allergies are rare in the COVID-19 population, and these outcomes suggest that allergy could be a protective factor for coronavirus infections. Allergic sensitization was inversely related to ACE2 expression, and natural exposure to an allergen and subsequent challenge significantly reduced ACE2 expression. It seems that allergy and controlled asthma could be partially protected from COVID-19.

In asthmatic patients it would be better to use a metered-dose inhaler or dry-powder inhaler rather than a nebulizer in order to prevent the risk of the spread of the virus via the device. If patients with mild-to-moderate asthma are well controlled and have sufficient maintenance medications, it would be better to postpone face-to-face visits along with online consultations. During the COVID-19 pandemic; stepwise treatment should be performed according to symptom severity in allergic rhinitis. However, given the benefits of controlling allergic rhinitis in patients who also have asthma, allergic rhinitis should also be treated more actively. In cases of mild/intermittent allergic rhinitis face-to-face consultation should be postponed, and instead online consultation is advisable.

Patients with severe atopic dermatitis are also likely to be vulnerable to respiratory infections because of their systemic immunosuppressive treatment. However, discontinuation of immunosuppressive agents should not be applied in all atopic dermatitis cases, since it can lead to the aggravation of atopic dermatitis and even to disseminated viral skin diseases such as eczema herpeticum.

In healthy subjects without any underlying diseases, chronic urticaria symptoms are not usually life-threatening, and visiting healthcare facilities needs to be delayed and rescheduled (a few weeks to a few months) during the COVID-19 pandemic. Regular administration of biologics, such as anti-IL-5, anti-IL-4 and anti-IgE antibodies, has become a common treatment option for severe asthma as well as for uncontrolled cases of chronic urticaria and atopic dermatitis. There have been no studies showing that biological agents may induce immune suppression and increase the risk of COVID-19. However, most of the biologics require periodic parenteral/subcutaneous administration, for which such patients have to visit an allergy clinic to receive medications according to a treatment protocol. During Covid 19 pandemic previous started treatments should be continued. There is no data showing that drugs or biological agents which are used in the treatment of asthma and allergic diseases may increase likelihood of getting or worsening of Covid 19 infection.