

## Severity of Allergic Contact Dermatitis: Significant or Insignificant?

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### INTRODUCTION

In March 2021, Olusegun and Martincigh published an article titled Allergic contact dermatitis: a significant and occupational skin disease [1]. I wrote this article during my doctoral programme because during my literature search there was no articling that had all the required information I needed. I had to use several articles that discussed different aspects of ACD to understand the different aspects of Allergic Contact Dermatitis (ACD). At the initial stage of my literature review, it was a bit difficult for me because I needed to have a comprehensive understanding of this disease and then develop an inchemico method, which is an alternative method to the use of animals for chemical testing. The difficulties encountered during the literature review and the quest for comprehensive knowledge of this skin disease resulted in the published article thereby filling the gap which I noticed, with the aim to help students and other readers to have a comprehensive grasp of ACD from a single article without needing to consult many articles as I did. Therefore, this article gives the readers a comprehensive and classic view of this skin disease.

### SIGNIFICANCE OF ALLERGIC CONTACT DERMATITIS

ACD is a significant environmental and occupational skin disease because this disease can be acquired through contact with different xenobiotics in the surrounding environment and/or workplace [1-6]. I was concerned about the possibility of the causes of ACD originating from the surrounding environment. In my quest for this understanding, I realised that the contact allergens can be from many sources, from personal care products to the workplace. ACD arising from many sources in our environment/or workplaces is challenging because it will require thorough and extensive investigation to identify the sources of the ACD in affected individuals through patch testing. Huge successes have been recorded in the identification of these allergens (causative agents) in patients through patch testing. However, my attention was drawn more to plants being sources of these contact allergens. In the cosmetic industry,

plants are being used as important ingredients to improve our skin conditions. Therefore, there is need to know the chemical components of these plants and investigate their allergenicity potentials especially if they are not yet known. It is quite impressive to know that patients can access database such as Contact Allergen Replacement Database (CARD) to adequately inform them of possible contact allergens in products and the possible alternatives [7]. CARDS also allow these patients to shop for the right products without panicking or fearing allergic reactions. Scientists are working earnestly to increase the battery of data for chemicals that have been identified, tested, and confirmed to be contact allergens. This battery of data will help Scientists especially Chemists to predict the reaction mechanisms of these chemicals as well as predict their sensitisation potentials.

### SEVERITY OF ALLERGIC CONTACT DERMATITIS

A few months ago, I examined an article that practically described the severity of ACD as not significant. I had to quickly correct this notion because apart from medically diagnosing this skin disease in patients, its severity should also be based on the effects of ACD in patients. Multiple studies [8-10] have shown that ACD impacts the quality of life of affected individuals greatly depending on their occupation, for example, a patient with severe hand dermatitis that is a baker, or a nurse might experience loss of jobs because the use of his/her hand is vital in this profession. These two professions as well as other wet professions involve the frequent washing of hands that can impact the affected hands of the patients. Therefore, the severity of ACD should not be termed "insignificant" at any time because the affected patients are in the best position to indicate how their lives have been negatively impacted by this skin disease. The patients or affected individuals must know and believe that we (their doctors, researchers and the society as a whole) understand their pain and condition because the psychological effect experienced by these individuals can be said to be enormous depending on their emotional capacities. The

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higher the degree of severity of ACD, the greater the psychological effect. Apart from the psychological effect associated with ACD in affected individuals, there are other effects such as loss of income, loss of social networks (social effect) as well as high medical costs for treatment [11-13].

## CONCLUSION

The fact that only the symptoms of this disease can be treated since it has no cure is an issue of concern and makes its severity significant. Affected individuals can be re-exposed to previous allergens responsible for this disease or new allergens similar to the previous allergens based on chemical composition thereby resulting in the recurrence of the disease. Therefore, with this understanding, it is my opinion that the severity of this disease must be termed significant in all correspondences and /or articles.

## CONFLICT OF INTEREST

The author declares that they have no conflict of interests.

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