

Preface

Dust allergy is a fairly common problem among individuals sensitive to inhalation of dust leading to various allergic manifestations such as allergic rhinitis, hay fever, atopic eczema, urticaria and in severe cases bronchial asthma. It is a fact that a threefold increase in the prevalence of different allergic disorders has been noticed in recent times throughout the globe and India is no exception. Such an exponential increase is mostly attributed to the rapid industrialization, unplanned urbanization, metamorphic change in lifestyle pattern and food habits, increase in air pollution, etc. Irrespective of the standard of living and the health consciousness, people of all cross sections of the society in different countries come in contact with dust of varying quality and quantity. As a consequence, sensitive people are susceptible to the detrimental effects of dust, most commonly in the form of dust allergy. Perusal of literature show that the information available in this respect is mostly from Western countries. However, data from Third-World countries like India are still fragmentary, and in comparison with documents for other allergic diseases, systematic compilation on dust allergy is still inadequate. In such a backdrop, the present attempt is a timely intervention. World is facing an unprecedented increase in the prevalence of allergic diseases with greater complexity and severity day by day. It is a public health problem, and extensive efforts should be made towards its understanding, particularly on its causes and consequences, diagnosis, prevention and optimal treatment. Therefore, an integrated approach is needed combining different branches of sciences such as entomology, immunology, molecular biology, epidemiology, pharmacology, genomics and computational biology for better understanding of disease pathogenesis, proper diagnosis and treatment of allergic diseases.

The whole content of the present compilation is divided into twelve distinct chapters, and each of them is rich in information based on supportive data and elaborately presented with necessary illustrations and proper referencing. An exhaustive review of the existing literature on different aspects of dust allergy in the field of researches in India and abroad with special reference to house dust mites has been provided. The present monograph also documents an appraisal

of the responsible allergens in our surroundings, house dust mites in particular, their diversity, distribution pattern, seasonality, life history traits and their clinical relevance with the disease pathogenesis and overall their allergenic potentiality. Insights on the hereditary links with dust allergy are extremely useful for in-depth understanding of the causes and concerns of dust allergy problem. The extent of topics covered in the book appears to fill up the vacant niche between the disease and its proper management. Overall, the extent of discussions on highly focused topics and the sequential appearance of the topics are perfectly blended to attract students of different disciplines apart from the general public to be knowledgeable about dust allergy. The length of the book and the matter discussed are fully matched to qualify as a document for easy reading and understanding the subject matter. A prior knowledge about the causes and symptoms of a disease facilitates smooth treatment process as well as formulation of prevention strategies. Thus, the present compilation appears to be a pioneer effort and fair approach to fulfil the requirements of the target audience through portraying different dimensions of dust allergy for the general readers as well as academicians interested in the field of allergy and immunology. Besides, there are ample scopes and potential to generate further information on dust allergy-related problems, particularly in developing countries with exceptionally large population at the same time with high parasitic load, where it has recently been came to the surface due to some anthropogenic activities. Thus, it provides an excellent opportunity for future researchers in this field of work. I am confident that this concise yet informative compilation would certainly make this book acceptable for general as well as medical students, researchers, health professionals and experts in the field of allergic research.

Kolkata, India

Goutam Kumar Saha

Acknowledgments

The author expresses his deep sense of gratitude to Late Prof. Deb Kumar Chaudhuri for his inspiration and encouragement throughout. The author expresses his gratefulness to Prof. A.K. Hati, Former Director, Calcutta School of Tropical Medicine, and Prof. Subrata Roy, Former Dean of Science, Burdwan University, for their moral support and encouragement. Sincere thanks and gratitude are to Prof. A. Ghosh, Vice Chancellor, CU, and Prof. D.J. Chattopadhyay, Former Pro-Vice Chancellor (Academic), CU, for their constant support and interest for this endeavour. Dr. N. Tandon, Dr. S.K. Gupta, Dr. Arunava Modak, Dr. Sanjay Podder, Dr. Sudipta Chaudhury and Ms. Shampa Dutta deserve special thanks for kindly allowing the author to use some of their research findings. The author also indebted to Prof. Sajal Roy, Dr. Gautam Aditya, Dr. Arindam Bhattacharya, Mr. Rakesh Tamang and Ms. Swarnali Mukherjee for their cooperation in various ways during the preparation of the manuscript. The author extends his heartfelt thanks to the Head and other faculty members of Department of Zoology, CU, and research scholars of the Entomology and Wildlife Biology Laboratory, Department of Zoology, CU, for their help and cooperations. Special thanks are also due to Allergy and Asthma Research Centre, Kolkata, for their keen interest. A good number of research articles, books, book chapters and websites have been consulted during the preparation of the manuscript, which is gratefully acknowledged.



<http://www.springer.com/978-981-10-1824-4>

Dust Allergy: Cause & Concern

Indian Perspective

Saha, G.K.

2016, XV, 99 p. 8 illus., Hardcover

ISBN: 978-981-10-1824-4