



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



HANAA ALY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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HANAA ALY



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Presented by

Fatema Elzahraa Abd El kader
(M.B., B.Ch)

Supervised by

Dr. Dina Sayed Sheha

Professor of Internal Medicine, Allergy and Clinical
Immunology Faculty of Medicine, Ain Shams University

Dr. Nayera Samy Mostafa

Professor of Community, Environmental and Occupational medicine
Faculty of Medicine, Ain Shams University

Dr. Hossam Moustafa Elkady

Lecturer of Internal Medicine, Allergy and Clinical Immunology
Faculty of Medicine, Ain Shams University

Faculty of Medicine
Ain Shams University
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List of Abbreviations

Abb.	Full term
<i>ACD</i>	<i>Allergic contact dermatitis</i>
<i>APCs</i>	<i>antigen-presenting cells</i>
<i>ASUH</i>	<i>Ain Shams University Hospital</i>
<i>BP</i>	<i>Blood Pressure</i>
<i>CLA</i>	<i>Cutaneous lymphocyte antigen</i>
<i>CU</i>	<i>Contact urticaria</i>
<i>CUS</i>	<i>Contact urticaria syndrome</i>
<i>Fce.</i>	<i>high-affinity IgE fc receptors</i>
<i>FDA</i>	<i>Food and Drug Administration</i>
<i>GM-CSF</i>	<i>granulocyte macrophage colony stimulating factor</i>
<i>H1 receptors</i>	<i>Histamine receptor type 1</i>
<i>H2 receptors</i>	<i>Histamine receptor type 2</i>
<i>HCWs</i>	<i>Health care workers</i>
<i>Hev b</i>	<i>Hevea brasiliensis</i>
<i>HIV</i>	<i>Human Immunodeficiency virus</i>
<i>HLDs</i>	<i>Hevein-like domains</i>
<i>HMW</i>	<i>High-molecular weight agents</i>
<i>IgE</i>	<i>Immunoglobulin E</i>
<i>IL</i>	<i>Interleukin</i>
<i>IUIS</i>	<i>International Union of Immunological Societies</i>
<i>LMW</i>	<i>Low-molecular weight agents</i>
<i>MHC II</i>	<i>Major histocompatibility antigens class II</i>
<i>NRL</i>	<i>Natural rubber latex</i>
<i>OA</i>	<i>Occupational asthma</i>

List of Abbreviations (Cont...)

Abb.	Full term
<i>OcAn</i>	<i>Occupational anaphylaxis</i>
<i>PLA2</i>	<i>Phospholipase A2</i>
<i>PPE</i>	<i>Personal protective equipment</i>
<i>SLIT</i>	<i>Sublingual immunotherapy</i>
<i>SPT</i>	<i>Skin-Prick Test</i>
<i>Th2</i>	<i>T helper cell 2</i>
<i>TMTD</i>	<i>Tetra methyl thiuram disulphide</i>
<i>TNF-α</i>	<i>Tumor necrosis factor alpha</i>
<i>WHO</i>	<i>World Health Organization</i>
<i>WRAR</i>	<i>Work-related allergic rhinitis</i>
<i>ZnO</i>	<i>Zinc oxide</i>

INTRODUCTION

Rubber (polyisoprene) is a vital natural resource that is used in the synthesis of a wide variety of commercial products ranging from airplane tires to protective medical gloves. Ninety-nine percent of natural rubber comes from one source: the sap-like fluid (latex) from the commercial rubber tree, *Hevea brasiliensis* (Hev b), found in Africa and Southeast Asia (Puskas et al, 2014).

Hundreds of allergens have been identified from natural rubber latex (NRL) and almost 15 official ones given numbers (Hev b1 to Hev b15) (Raulf, 2018).

Latex allergy is a well-known problem among healthcare workers (HCWs) (clinicians, nurses, dentists, laboratory worker, emergency medical technicians and patient transporters) while utilizing gloves or inhaling aerosolized particles (Wu et al, 2016).

The United States Occupational Safety and Health Administration issued in 1992 the Blood borne Pathogens Standard that required protective glove use. Since universal precautions were introduced; there has been an increase in the use of medical gloves resulting in increasing latex allergen exposure thus contributing to the epidemic of latex allergy (Tarlo and Liss, 2018).

Clinical manifestations of latex allergy include immunoglobulin E (IgE) mediated allergy (contact urticaria,

allergic rhinoconjunctivitis, asthma, anaphylaxis and latex-fruit syndrome) and non- immunoglobulin E mediated reactions (contact dermatitis) (Makatsori et al, 2017).

Latex allergy is one of the major health concerns. In Turkey, latex sensitivity is reported in $\leq 1\%$ of non-atopic general population but reaches up to 5–15% among HCWs (Köse et al, 2014).

Approximately 10 to 20 percent of HCWs are sensitized to latex. Data published in the early 21st century showed that latex allergy was diagnosed in 10% to 17% of HCWs (Feteih 2020).