

Contents

1 Historical Aspects	1
Jean-Marie Lachapelle	

Part I Basic Features

2 Genetics and Individual Predispositions in Contact Dermatitis	13
Axel Schnuch and Berit Christina Carlsen	
3 Mechanisms of Irritant and Allergic Contact Dermatitis.	43
Thomas Rustemeyer, Ingrid M.W. van Hoogstraten, B. Mary E. von Blomberg, Sue Gibbs, and Rik J. Scheper	
4 Molecular Aspects in Allergic and Irritant Contact Dermatitis.	91
Jean-Pierre Lepoittevin	
5 Bio-Guided Fractionation and Identification of Allergens in Complex Mixtures and Products	111
Elena Giménez-Arnau	
6 Role of the Permeability Barrier in Contact Dermatitis.	121
Ehrhardt Proksch and Jochen Brasch	
7 Immediate Contact Reactions	137
David Basketter and Arto Lahti	
8 Mechanisms of Phototoxic and Photoallergic Reactions.	155
Renz Mang, Helger Stege, and Jean Krutmann	

Part II Pathology

9 Histopathological and Immunohistopathological Features of Irritant and Allergic Contact Dermatitis.	167
Jean-Marie Lachapelle and Liliane Marot	

10	Ultrastructure of Irritant and Allergic Contact Dermatitis	179
	Carolyn M. Willis	
11	Epidemiology	193
	Pieter-Jan Coenraads, Wolfgang Uter, and Thomas Diepgen	

Part III Dermatotoxicology

12	Skin Penetration	215
	Hans Schaefer, Thomas E. Redelmeier, and Jürgen Lademann	
13	Predictive Tests for Irritants and Allergens and Their Use in Quantitative Risk Assessment	229
	David Basketter and Ian Kimber	
14	Allergic Contact Dermatitis in Humans: Experimental and Quantitative Aspects.	241
	Jeanne Duus Johansen, Peter J. Frosch, and Torkil Menné	

Part IV Clinical Features

15	Clinical Features	255
	Niels K. Veien	
16	Clinical Aspects of Irritant Contact Dermatitis.	305
	Peter J. Frosch and Swen Malte John	
17	Systemic Contact Dermatitis	347
	Niels K. Veien and Torkil Menné	
18	Phototoxic and Photoallergic Reactions	361
	Margarida Gonçalo	
19	Pigmented Contact Dermatitis and Chemical Depigmentation	377
	Hideo Nakayama	
20	Hand Eczema	395
	Tove Agner	
21	Protein Contact Dermatitis	407
	An Goossens and Cristina Amaro	
22	Noneczematous Contact Reactions	415
	Anthony Goon and Chee-Leok Goh	

23 Respiratory Symptoms from Fragrances and the Link with Dermatitis	429
Jesper Elberling	

Part V Diagnostic Tests

24 Patch Testing	439
Magnus Lindberg and Mihaly Matura	
25 Atopy Patch Testing with Aeroallergens and Food Proteins	465
Ulf Darsow and Johannes Ring	
26 Patch Testing in Adverse Drug Reactions	475
Margarida Gonalo and Derk P. Bruynzeel	
27 Allergens Exposure Assessment	493
Birgitta Gruvberger, Magnus Bruze, Sigfrid Fregert, and Carola Lid�n	
28 Skin Tests for Immediate Hypersensitivity.	511
Carsten Bindslev-Jensen	
29 Photopatch Testing	519
Margarida Gonalo	
30 Noninvasive Techniques for Quantification of Contact Dermatitis	533
J�rgen Serup	

Part VI Allergic Contact Dermatitis Related to Specific Exposures

31 Allergens from the European Baseline Series	545
Klaus E. Andersen, Ian R. White, and An Goossens	
32 Cosmetics and Skin Care Products.	591
Jonathan M.L. White, Anton C. de Groot, and Ian R. White	
33 Fragrances.	607
Jeanne Duus Johansen and Jean-Pierre Lepoittevin	
34 Hair Dyes.	629
David Basketter, Jeanne Duus Johansen, John McFadden, and Heidi S�st�d	

35 Metals	643
Carola Lidén, Magnus Bruze, Jacob Pontoppidan Thyssen, and Torkil Menné	
36 Metalworking Fluids	681
Johannes Geier and Holger Lessmann	
37 Plastic Materials	695
Bert Björkner, Malin Frick-Engfeldt, Ann Pontén, and Erik Zimerson	
38 Topical Drugs	729
Francisco M. Brandão and An Goossens	
39 Dental Materials	763
Marléne Isaksson	
40 Clothing	793
Christophe-J. Le Coz	
41 Shoes	819
An Goossens and James S. Taylor	
42 Occupational Contact Dermatitis	831
Peter J. Frosch and Katrin Kügler	
43 Occupational Contact Dermatitis: Health Personnel	841
Ana M. Giménez-Arnau	
44 Occupational Contact Dermatitis: Chefs and Food Handlers	853
Vera Mahler	
45 Occupational Contact Dermatitis: Hairdressers	865
Heidi Søsted	
46 Plants and Plant Products	873
Christophe J. Le Coz, Georges Ducombs, and Evy Paulsen	
47 Pesticides	927
Carola Lidén	
48 Contact Allergy in Children	937
Marie-Anne Morren and An Goossens	
49 Therapy and Rehabilitation of Allergic and Irritant Contact Dermatitis	963
Dimitar Antonov, Sibylle Schliemann, and Peter Elsner	

50 Prevention of Hand Eczema: Gloves, Barrier Creams and Workers' Education	985
Britta Wulfhorst, Meike Bock, Christoph Skudlik, Walter Wigger-Alberti, and Swen Malte John	
51 Prevention of Allergic Contact Dermatitis: Safe Exposure Levels of Sensitizers	1017
Jacob Pontoppidan Thyssen and Torkil Menné	
52 Legislation	1023
Ian R. White and David Basketter	
53 International Comparison of Legal Aspects of Workers' Compensation for Occupational Contact Dermatitis	1029
Peter J. Frosch, Werner Aberer, Paul J. August, Tove Agner, Lieve Constandt, L. Conde-Salazar, Swen M. John, Christophe Le Coz, Howard I. Maibach, Haydn L. Muston, Rosemary L. Nixon, Hanspeter Rast, W.I. van Tichelen, Jason Williams, Patricia Engasser, Felipe Heras, Magnus Lindberg, and Antti Laurema	
54 Databases and Networks. The Benefit of Research and Quality Assurance in Patch Testing	1053
Wolfgang Uter, Axel Schnuch, Ana Giménez-Arnau, David Orton, and Barry Statham	
55 Contact Dermatitis Research Groups	1065
Derk P. Bruynzeel	
56 Patch Test Concentrations and Vehicles for Testing Contact Allergens	1071
Anton C. De Groot and Peter J. Frosch	
57 Patch Testing with the Patients' Own Products	1107
Peter J. Frosch, Johannes Geier, Wolfgang Uter, and An Goossens	
58 Dictionary of Contact Allergens: Chemical Structures, Sources, and References	1121
Christophe J. Le Coz and Jean-Pierre Lepoittevin	
Index	1249