Contents

1. Toll-like Receptors: Its Role in Dermatology **1**
Susmit Haldar

- *Innate immunity: no more 'nonspecific'! 1*
- *Toll receptors and toll-like receptors 2*
- *TLRs: structure and repertoire in skin 2*
- *Ligands for TLRs 3*
- *TLR signaling 3*
- *Outcome of TLR activation 5*
- *TLRs in dermatology 6*
- *Role of TLRs in skin diseases 6*
- *TLRs in the treatment of skin diseases 15*

2. Pathogenesis and Management of Acne: Recent Developments **29**
Dipankar De, Rahul Mahajan

- *Sebaceous glands and sebum 30*
- *Pattern recognition receptors 36*
- *Filaggrin and acne 36*
- *Genetics in acne 37*
- *Natural resolution of comedone and acne 37*
- *Newer developments in the management of acne 37*
- *Acne in pigmented skin 43*

3. Medical Treatment of Infantile Hemangiomas **49**
M K Shah, D A Parikh

- *Diagnosing infantile hemangiomas 49*
- *Pathogenesis 50*
- *Do all infantile hemangioma require treatment? 51*
- *Medical management of hemangiomas 51*
- *Is propranolol safe in cases of PHACE syndrome? 55*
- *Management of the residual lesions 56*
- *Topical therapy 56*

4. Hand Eczema: How to Approach **61**
Asit Mittal, Nidheesh

- *Epidemiology and burden of disease 61*
- *Etiology 61*
- *Hand eczema patterns 62*
- *Patch test reactivity 65*
- *Foods 67*
- *Food additives 67*
- *Detergents 68*
- *Differential diagnosis 68*
- *Therapy of chronic hand eczema 69*

5. Alopecia Areata: An Update 72
Kumar Satyaprakash
- *Definition 72*
- *Epidemiology 72*
- *Etiology 72*
- *Pathogenesis 74*
- *Histopathology 75*
- *Clinical features 76*
- *Diagnosis 77*
- *Differential diagnosis 78*

6. Pulse Therapy 89
Jyoti Nath, Pankaj Adhikari
- *Mechanism of action 90*
- *Side effects of glucocorticoids 92*
- *Cyclophosphamide 93*
- *Standard DCP regimen 96*
- *Modification in duration of phase II and phase III 97*
- *Side effects 98*
- *Future strategy 100*

7. Scabies: An Update 107
Abhishek De, Nidhi Chowdhury, Aarti Sarda
- *Life cycle of scabies mite 107*
- *Transmission 108*
- *Pathogenesis 108*
- *Clinical features 108*
- *Histopathology 111*
- *Complications 112*
- *Differential diagnosis 112*
- *Diagnosis 112*
- *Treatment 113*
- *Prevention 115*

8. Management of Urticaria: Present Scenario 118
Kiran Godse
- *Definition 118*
- *Management of chronic urticaria 118*

9. Topical Immunotherapy: Role in Dermatology 126
Gurcharan Singh, Bhanu Prakash
- *Topical immunomodulators 126*
- *Topical contact sensitizers 127*
- *Mechanism of action 128*
- *Method of sensitization 129*
- *Therapeutic applications and efficacy 129*
- *Side effects 131*

10. Arsenicosis: Indian Perspective **134**
Nilendu Sarma
- *Indian perspective 134*
- *Arsenic: molecular chemistry and sources 135*
- *Genesis of ground water arsenic in India 136*
- *Exposure duration and toxic dose 137*
- *Mechanism of arsenic-induced damage 137*
- *Clinical features 139*
- *Diagnosis of arsenicosis 145*
- *Therapeutic use of arsenic 147*
- *Management 148*

11. Post-kala-azar Dermal Leishmaniasis: An Update **154**
Nilay Kanti Das, Pijush Kanti Datta, Debanjan Mukhopadhyay, Mitali Chatterjee
- *Epidemiology 155*
- *Etiology—pathogenesis/immune mechanisms at work 157*
- *Clinical features 159*
- *Diagnosis 164*
- *Management 169*

12. Subcutaneous Mycosis: An Overview **176**
NL Sharma
- *Classification 176*
- *Sporotrichosis 177*
- *Chromoblastomycosis 179*
- *Mycetoma 181*
- *Entomophthoromycosis 183*
- *Phaeohyphomycosis 184*
- *Mucormycosis 185*

13. Chemical Leukoderma: An Update **187**
Sanjay Ghosh
- *History 187*
- *Etiopathogenesis 188*
- *Contributory agents 189*
- *Clinical features 192*
- *Chemical leukoderma: clinical diagnostic criteria 197*
- *Management 199*
- *Chemical leukoderma vs idiopathic vitiligo 199*

14. Human Papillomavirus and its Role in the Etiopathogenesis of Mucocutaneous Malignancies **203**
Partha Basu, Jaydip Biswas
- *Description and classification of HPV 203*
- *Epidemiology of HPV infection 205*
- *Mechanism of virus entry and replication 206*
- *Natural immune response to HPV infection 207*
- *Evidence of causal relationship between HPV and cancer 209*
- *Mechanism of carcinogenesis 209*

- *Mucocutaneous benign, premalignant and malignant lesions associated with HPV 211*
- *Oral and oropharyngeal cancers 222*

15. Adverse Cutaneous Drug Reactions to Antiretroviral Drugs 227
Subhasish Kamal Guha, Dolanchampa Modak

- *Common skin reactions from antiretroviral drugs 228*
- *Common antiretroviral drugs: their cutaneous side effects 232*

16. Non-venereal Male Genital Lesions: An Update 242
Prasenjeet Mohanty, Surajit Nayak

- *Normal variants 243*
- *Developmental and benign acquired lesions of genitalia 243*
- *Non-sexually transmitted infections 244*
- *Mucocutaneous disorders 249*
- *Eczematous dermatoses 250*
- *Lesions due to trauma and artifacts 251*
- *Premalignant and malignant lesions 252*
- *Non-venereal lesions peculiar to the genitalia 256*

17. Newer Drugs in Dermatology 261
Saurav Kundu

- *Newer topical antifungals 261*
- *Newer systemic antifungals 262*
- *Newer systemic antibacterials 265*
- *Newer systemic antivirals 267*
- *Newer biologicals 268*
- *Newer miscellaneous topical drugs 271*
- *Newer miscellaneous systemic drugs 274*

18. Lasers in Skin of Color 279
Anil Ganjoo

- *Pigmented lasers 280*
- *Laser hair reduction 282*
- *Vascular lasers 284*
- *Laser resurfacing for atrophic scars and photodamage 284*

Index 291