

TEXTBOOK and ATLAS of

Pediatric Dermatology

**V. Piccolo, I. Neri, M. El Hachem, M. Cutrone,
E. Moscarella, A. Diociaiuti, O. Ametrano,
G. Argenziano**

TEXTBOOK and ATLAS of

Pediatric Dermatology

English translation by
Camila Scharf

PICCIN

ALL RIGHTS RESERVED

This work is protected by copyright. No part of this publication may be reproduced, distributed or used in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, or stored in a database or retrieval system, including, but not limited to, in any network or other electronic storage or transmission, or broadcast for distance learning, without the prior written consent of the Publisher. Any unauthorized distribution or use of this work, as well as any alteration of its electronic information, constitutes a violation of the rights of the Publisher and the Author(s) and will be sanctioned according to civil and criminal law, as provided by Law 633/1941 and following.

As new scientific information becomes available through basic and clinical research, recommended treatments and drug therapies undergo changes. The Author(s) and Publisher have done everything possible to make this book accurate, up to date, and in accord with accepted standards at the time of publication. The Author(s), Editors, and Publisher are not responsible for errors or omissions or for consequences from application of the book, and make no warranty, expressed or implied, in regard to the contents of the book. Any practice described in this book should be applied by the reader in accordance with professional standards of care used in regard to the unique circumstances that may apply in each situation. The reader is advised always to check product information (package inserts) for changes and new information regarding dose and contraindications before administering any drug. Caution is especially urged when using new or infrequently ordered drugs.

ISBN 978-88-299-3342-6

To Mauro, the one who was the soul of the group
*Vincenzo Piccolo, Iria Neri, Maya El Hachem, Mario Cutrone, Elvira Moscarella,
Andrea Diociaiuti, Orsola Ametrano, Giuseppe Argenziano*

To my father Stefano who showed me the way, to my wife Teresa who took me by the hand to go through life, to my son Emanuele who gave meaning to this path
Vincenzo Piccolo

To my family who have allowed me to dedicate myself, to the masters who have passed on to me the passion, to my young collaborators who support me with enthusiasm, to my colleagues and to patients who trust us and make us feel useful
Iria Neri

To our patients who have helped us grow and create a group of friendly professionals at their service. I have received so much in my life and I hope to give something to whoever wants
Maya El Hachem

To Monica, Serena, Sofia and Pietro
Mario Cutrone

To my mother
Elvira Moscarella

To Tommaso and Edoardo and my wife Beatrice
Andrea Diociaiuti

To my husband, my children, my grandson Leonardo, the future of our family
To my dear colleague Rosalba Picciocchi with whom I shared precious years
in Pediatric Dermatology
Orsola Ametrano

To my father, who opened the doors of this magnificent medical discipline to me, dermatology
Giuseppe Argenziano

Table of contents

Chapter 1	
DERMATOSSES OF THE NEWBORN	1
Vernix caseosa, maceration and desquamation of post-maturity	1
Epidemiology and etiology	1
Clinical features and diagnosis	1
Differential diagnosis	1
Therapy and prognosis	2
References	2
Transient neonatal pustular melanosis	6
Epidemiology and etiology	6
Clinical features and diagnosis	6
Differential diagnosis	6
Therapy and prognosis	6
References	6
Erythema toxicum neonatorum	10
Epidemiology and etiology	10
Clinical features and diagnosis	10
Differential diagnosis	10
Therapy and prognosis	10
References	10
Hyperplasia of sebaceous glands	15
Epidemiology and etiology	15
Clinical features and diagnosis	15
Differential diagnosis	15
Therapy and prognosis	15
References	15
Milia	19
Epidemiology and etiology	19
Clinical features and diagnosis	19
Differential diagnosis	19
Therapy and prognosis	19
References	20
Ecchymosis/petechiae from mode of presentation at delivery	24
Epidemiology and etiology	24
Clinical features and diagnosis	24
Differential diagnosis	24
Therapy and prognosis	24
References	24
Suction blisters	28
Epidemiology and etiology	28
Clinical features and diagnosis	28
Differential diagnosis	28
Therapy and prognosis	28
References	29

INFLAMMATORY CONDITIONS OF THE SKIN

Chapter 2	
ECZEMA	37
Atopic Dermatitis (AD)	37
Epidemiology and etiology	37
Clinical features and diagnosis	37
Differential diagnosis	38
Therapy and prognosis	38
References	38
Allergic contact dermatitis (ACD)	45
Epidemiology and etiology	45
Clinical features and diagnosis	45
Differential diagnosis	46
Therapy and prognosis	46
References	46
Chapter 3	
PAPULOSQUAMOUS DISORDERS	51
Psoriasis	51
Definition	51
Epidemiology and etiology	51
Clinical features and diagnosis	51
Differential diagnosis	52
Therapy and prognosis	52
References	53
Pityriasis rubra pilaris	61
Definition	61
Epidemiology and etiology	61
Clinical features and diagnosis	61
Differential diagnosis	62
Therapy and prognosis	62
References	62
Pityriasis lichenoides	69
Epidemiology and etiology	69
Clinical features and diagnosis	69
Differential diagnosis	70
Therapy and prognosis	70
References	71
Lymphomatoid papulosis	76
Epidemiology and etiology	76
Clinical features and diagnosis	76
Differential diagnosis	77
Therapy and prognosis	77
References	77

Pityriasis rosea of Gibert	81	Differential diagnosis	123
Definition.....	81	Therapy and prognosis	123
Epidemiology and etiology.....	81	References	124
Clinical features and diagnosis.....	81		
Differential diagnosis.....	81		
Therapy and prognosis	81		
References	81		
Lichen planus.....	87		
Definition.....	87		
Epidemiology and etiology.....	87		
Clinical features and diagnosis.....	87		
Differential diagnosis	87		
Therapy and prognosis	88		
References	88		
Lichen nitidus	94		
Definition.....	94		
Epidemiology and etiology.....	94		
Clinical features and diagnosis	94		
Differential diagnosis	94		
Therapy and prognosis	94		
References	94		
Chapter 4			
HYPERSensitivity DISEASES	99		
Urticaria	99		
Definition.....	99		
Epidemiology and pathogenesis.....	99		
Clinical features and diagnosis	99		
Differential diagnosis	100		
Therapy and prognosis	101		
References	101		
Sweet's syndrome	106		
Definition.....	106		
Epidemiology and etiology	106		
Clinical features and diagnosis	106		
Differential diagnosis	107		
Therapy and prognosis	107		
References	108		
Wells' syndrome	111		
Definition.....	111		
Epidemiology and etiology	111		
Clinical features and diagnosis	111		
Differential diagnosis	112		
Therapy and prognosis	112		
References	113		
Chapter 5			
FOLLICULAR DISEASES	117		
Follicular mucinosis.....	117		
Epidemiology and etiology	117		
Clinical features and diagnosis	117		
Differential diagnosis	118		
Therapy and prognosis	118		
References	119		
Folliculotropic mycosis fungoides	122		
Epidemiology and etiology	122		
Clinical features and diagnosis	122		
Chapter 6			
ADVERSE REACTIONS TO DRUGS	127		
Drug induced maculopapular exanthem.....	127		
Epidemiology and etiology	127		
Clinical features and diagnosis	127		
Differential diagnosis	127		
Therapy and prognosis	127		
References	130		
Dress	131		
Epidemiology and etiology	131		
Clinical features and diagnosis	131		
Differential diagnosis	132		
Therapy and prognosis	132		
Stevens-Johnson Syndrome and Toxic epidermal necrolysis	135		
Epidemiology and etiology	135		
Clinical features and diagnosis	135		
Differential diagnosis	135		
Therapy and prognosis	135		
References	136		
Erythema multiforme	139		
Epidemiology and etiology	139		
Clinical features and diagnosis	139		
Differential diagnosis	139		
Therapy and prognosis	139		
References	139		
Chapter 7			
SKIN DISORDERS FROM SUN EXPOSURE... 145			
Erythema and sunburns	145		
Photodermatoses	146		
Photodermatoses mediated by photosensitizing agents	146		
Idiopathic photodermatoses	147		
Photodermatoses associated with genetic diseases.....	150		
Photoaggravated dermatoses	150		
References	150		
Chapter 8			
AUTOIMMUNE BULLOUS DISEASES	155		
Pemphigus	155		
Epidemiology and etiology	155		
Clinical features and diagnosis	156		
Differential diagnosis	157		
Therapy	157		
References	158		
Bullous pemphigoid.....	160		
Epidemiology and etiology	160		
Clinical features and diagnosis	160		
Differential diagnosis	161		
Therapy and prognosis	161		
References	161		
Dermatitis herpetiformis	166		

Epidemiology and etiology	166	Therapy and prognosis	205
Clinical features and diagnosis.....	166	References	205
Differential diagnosis	167	Rubella	208
Therapy and prognosis	167	Epidemiology and etiology	208
References	168	Clinical features and diagnosis	208
Linear IgA bullous dermatosis	172	Therapy and prognosis	208
Epidemiology and etiology	172	References	208
Clinical features and diagnosis	172	Hand-foot-mouth disease	210
Differential diagnosis	173	Epidemiology and etiology	210
Therapy and prognosis	173	Clinical features and diagnosis	210
References	174	Therapy and prognosis	210
Chapter 9		References	210
MYCOSIS FUNGOIDES	179	Measles	214
Mycosis fungoides	179	Epidemiology and etiology	214
Epidemiology and etiology	179	Clinical features and diagnosis	214
Clinical features and diagnosis.....	179	Therapy and prognosis	214
Differential diagnosis	180	References	214
Therapy and prognosis	181	Papular purpuric gloves and socks syndrome .217	
References	181	Epidemiology and etiology	217
INFECTIONS AND INFESTATIONS OF THE SKIN		Clinical features and diagnosis.....	217
Chapter 10		Therapy and prognosis	217
VIRAL INFECTIONS	187	References	217
Varicella	187	Pityriasis rosea	220
Epidemiology and etiology	187	Epidemiology and etiology	220
Clinical features and diagnosis.....	187	Clinical features and diagnosis.....	220
Therapy and prognosis	187	Therapy and prognosis	220
References	188	References	220
Molluscum contagiosum	191	Gianotti-Crosti Syndrome	223
Epidemiology and etiology	191	Epidemiology and etiology	223
Clinical features and diagnosis.....	191	Clinical features and diagnosis.....	223
Therapy and prognosis	191	Therapy and prognosis	223
References	191	References	223
Herpes simplex	194	Asymmetric periflexural exanthem of childhood	225
Epidemiology and etiology	194	Epidemiology and etiology	225
Clinical features and diagnosis.....	194	Clinical features and diagnosis.....	225
Therapy and prognosis	194	Therapy and prognosis	225
References	194	References	225
Herpes zoster	196	Chapter 11	
Epidemiology and etiology	196	BACTERIAL INFECTIONS	229
Clinical features and diagnosis.....	196		
Therapy and prognosis	196		
References	196		
Roseola infantum	199	Impetigo	229
Epidemiology and etiology	199	Epidemiology and etiology	229
Clinical features and diagnosis.....	199	Clinical features and diagnosis.....	229
Therapy and prognosis	199	Therapy and prognosis	229
References	199	References	230
Warts	202	Ecthyma	233
Epidemiology and etiology	202	Epidemiology and etiology	233
Clinical features and diagnosis.....	202	Clinical features and diagnosis.....	233
Therapy and prognosis	202	Therapy and prognosis	233
References	202	References	233
Fifth Disease	205	Folliculitis	236
Epidemiology and etiology	205	Epidemiology and etiology	236
Clinical features and diagnosis.....	205	Clinical features and diagnosis.....	236
Therapy and prognosis	205	Therapy and prognosis	236
References	205	References	236
Furunculosis	238	Epidemiology and etiology	238

Chapter 12	
FUNGAL INFECTIONS	267
Pityriasis versicolor	267
Epidemiology and etiology	267
Clinical features and diagnosis.....	238
Therapy and prognosis	238
References	238
Staphylococcal scalded skin syndrome (SSSS)	241
Epidemiology and etiology	241
Clinical features and diagnosis.....	241
Therapy and prognosis	241
References	241
Recurrent toxin-mediated perineal erythema	244
Epidemiology and etiology	244
Clinical features and diagnosis.....	244
Therapy and prognosis	244
References	244
Scarlet Fever.....	246
Epidemiology and etiology	246
Clinical features and diagnosis.....	246
Therapy and prognosis	246
References	246
Erythrasma	249
Epidemiology and etiology	249
Clinical features and diagnosis.....	249
Therapy and prognosis	249
References	249
Trichomycosis axillaris	251
Epidemiology and etiology	251
Clinical features and diagnosis.....	251
Therapy and prognosis	251
References	251
Pitted Keratolysis	253
Epidemiology and etiology	253
Clinical features and diagnosis.....	253
Therapy and prognosis	253
References	253
Gram negative folliculitis	256
Epidemiology and etiology	256
Clinical features and diagnosis.....	256
Therapy and prognosis	256
References	256
Cat scratch disease	259
Epidemiology and etiology	259
Clinical features and diagnosis.....	259
Therapy and prognosis	259
References	259
Lyme's Disease	261
Epidemiology and etiology	261
Clinical features and diagnosis.....	261
Therapy and prognosis	261
References	261
Actinomycosis	265
Epidemiology and etiology	265
Clinical features and diagnosis.....	265
Therapy and prognosis	265
References	265
Chapter 13	
PARASITIC INFECTIONS	285
Cutaneous Leishmaniasis	285
Epidemiology and etiology	285
Clinical features and diagnosis.....	285
Differential diagnosis	285
Therapy and prognosis	286
References	286
Cutaneous Larva migrans	290
Epidemiology and etiology	290
Clinical features and diagnosis.....	290
Differential diagnosis	290
Therapy and prognosis	290
References	290
Chapter 14	
ARTHROPOD INFESTATIONS	293
Entomodermatoses	293
Epidemiology and etiology	293
Clinical features and diagnosis.....	293
Differential diagnosis	293
Therapy and prognosis	293
References	294

Scabies	298
Epidemiology and etiology	298
Clinical features and diagnosis	298
Differential diagnosis	298
Therapy and prognosis	298
References	298
Pediculosis	302
Epidemiology and etiology	302
Clinical features and diagnosis	302
Differential diagnosis	302
Therapy and prognosis	302
References	302
Phthiriasis	305
Epidemiology and etiology	305
Clinical features and diagnosis	305
Differential diagnosis	305
Therapy and prognosis	305
References	305
Tungiasis	308
Epidemiology and etiology	308
Clinical features and diagnosis	308
Differential diagnosis	308
Therapy and prognosis	308
References	308

SKIN TUMOURS

Chapter 15	
MELANOCYTIC TUMORS	313
Congenital Nevus	313
Epidemiology and etiology	313
Clinical features and diagnosis	313
Differential diagnosis	313
Therapy and prognosis	313
References	314
Acquired Nevus	318
Epidemiology and etiology	318
Clinical features and diagnosis	318
Differential diagnosis	318
Therapy and prognosis	318
References	318
Halo Nevus	320
Epidemiology and etiology	320
Clinical features and diagnosis	320
Differential diagnosis	320
Therapy and prognosis	320
References	320
Dermal Melanocytosis	321
Mongolian Spots	321
Nevus of Ota and Ito	321
References	321
Blue Nevus	324
Epidemiology and etiology	324
Clinical features and diagnosis	324
Differential diagnosis	324
Therapy and prognosis	324
References	324
Pigmented Epithelioid Melanocytoma (PEM)	.326

Epidemiology and etiology	326
Clinical features and diagnosis	326
Differential diagnosis	326
Therapy and prognosis	326
References	326
Spitz Nevus	328
Epidemiology and etiology	328
Clinical features and diagnosis	328
Differential diagnosis	328
Therapy and prognosis	328
References	328
Atypical Spitz Tumor	330
Epidemiology and etiology	330
Clinical features and diagnosis	330
Differential diagnosis	330
Therapy and prognosis	330
References	330
Melanoma	332
Epidemiology and etiology	332
Clinical features and diagnosis	332
Differential diagnosis	332
Therapy and prognosis	332
References	333
Chapter 16	
NON-MELANOCYTIC TUMORS	335
Lobular capillary hemangioma (Pyogenic granuloma)	335
Epidemiology and etiology	335
Clinical features and diagnosis	335
Differential diagnosis	335
Therapy and prognosis	335
References	335
Angiokeratoma	337
Epidemiology and etiology	337
Clinical features and diagnosis	337
Differential diagnosis	337
Therapy and prognosis	337
References	337
Cutaneous Cysts	340
Epidemiology and etiology	340
Clinical features and diagnosis	340
Differential diagnosis	340
Therapy and prognosis	340
References	341
Pilomatricoma	343
Epidemiology and etiology	343
Clinical features and diagnosis	343
Differential diagnosis	343
Therapy and prognosis	343
References	343
Histiocytosis	345
Langerhans Cell histiocytosis	345
Epidemiology and etiology	345
Clinical features and diagnosis	345
Differential diagnosis	345
Therapy and prognosis	345
References	345

Juvenile Xantogranuloma	347
Epidemiology and etiology	347
Clinical features and diagnosis	347
Differential diagnosis	347
Therapy and prognosis	347
References	347
Cutaneous Mastocytosis	349
Epidemiology and etiology	349
Clinical features and diagnosis	349
Differential diagnosis	349
Therapy and prognosis	349
References	350
Dermatofibroma	352
Epidemiology and etiology	352
Clinical features and diagnosis	352
Differential diagnosis	352
Therapy and prognosis	352
References	353
Epidermal Nevi	354
Verrucous epidermal nevus	354
Nevus Sebaceous	354
Nevus Comedonicus	354
References	355
Other rare non melanocytic nevi	359
Connective tissue nevus	359
Epidemiology and etiology	359
Clinical features and diagnosis	359
Differential diagnosis	359
Therapy and prognosis	359
References	359
Nevus lipomatous	361
Epidemiology and etiology	361
Clinical features and diagnosis	361
Differential diagnosis	361
Therapy and prognosis	361
References	361
Smooth muscle hamartoma	362
Epidemiology and etiology	362
Clinical features and diagnosis	362
Differential diagnosis	362
Therapy and prognosis	362
References	362
Genetic syndromes associated with skin tumors	363
Xeroderma pigmentosum	363
Epidemiology and etiology	363
Clinical features and diagnosis	363
Differential diagnosis	363
Therapy and prognosis	363
References	363
Gorlin-Goltz Syndrome	364
Epidemiology and etiology	364
Clinical features and diagnosis	364
Differential diagnosis	364
Therapy and prognosis	365
References	365
Bazex-Duprè-Christol syndrome	366
Epidemiology and etiology	366
Clinical features and diagnosis	366
Differential diagnosis	366
Therapy and prognosis	366
References	366
Muir-Torre syndrome	368
Epidemiology and etiology	368
Clinical features and diagnosis	368
Differential diagnosis	368
Therapy and prognosis	368
References	368
VASCULAR ANOMALIES	
Chapter 17	
VASCULAR ANOMALIES	373
Vascular anomalies	373
Definition	373
Classification	373
Vascular tumors	373
Classification	373
Infantile Hemangiomas (IH)	375
Classification	375
Natural history	382
Clinical features	382
Complications and evolution	382
Diagnosis	386
Therapy	386
Topical therapy	389
Dye laser therapy	389
Surgical treatment	389
Congenital hemangiomas	390
Non involuting congenital hemangioma (NICH)	390
Clinical features	390
Diagnosis	390
Therapy	390
Rapidly involuting congenital hemangioma (RICH)	391
Clinical features	391
Diagnosis	391
Therapy	392
Tufted angioma (TA)	393
Clinical features	393
Diagnosis	393
Therapy	393
Kaposiform Hemangioendothelioma (KHE)	395
Epidemiology and clinical features	395
Diagnosis	396
Therapy	396
References	396
Chapter 18	
VASCULAR MALFORMATIONS	399
Capillary malformations	399
Classification	399
Clinical features	399
Diagnosis	402
Venous malformations (VM)	404

Clinical features	404
Diagnosis	404
Therapy	404
Lymphatic malformations (LM)	408
Clinical features	408
Diagnosis	408
Therapy	408
Arteriovenous malformations (AVM)	412
Classification	412
Clinical features	412
Diagnosis	412
Therapy	414
Complex malformations	415
References	417
 HAIR, NAILS, SWEAT AND SEBACEOUS GLANDS DISEASES	
Chapter 19	
HAIR DISEASES	421
Diffuse congenital alopecias.....	421
Hypotrichosis simplex	421
Epidemiology and etiology	421
Clinical features and diagnosis.....	421
Therapy and prognosis	422
References	422
Ectodermal dysplasias	424
Epidemiology and etiology	424
Clinical features and diagnosis.....	424
Therapy and prognosis	426
References	426
Congenital alopecia in patches	428
Neonatal occipital alopecia	428
Epidemiology and etiology	428
Clinical features and diagnosis.....	428
Therapy and prognosis	428
References	428
Congenital triangular alopecia	430
Epidemiology and etiology	430
Clinical features and diagnosis.....	430
Therapy and prognosis	431
References	431
Aplasia cutis congenita	432
Epidemiology and etiology	432
Clinical features and diagnosis.....	432
Therapy and prognosis	433
References	433
Anomalies of the hair shaft	435
Monilethrix	436
Epidemiology and etiology	436
Clinical features and diagnosis.....	436
Therapy and prognosis	437
References	437
Pseudomonilethrix	438
Epidemiology and etiology	438
Clinical features and diagnosis.....	438
Therapy and prognosis	438
References	438
Pili torti	440
Epidemiology and etiology	440
Clinical features and diagnosis	440
Therapy and prognosis	441
References	442
Congenital trichorrhexis nodosa	443
Epidemiology and etiology	443
Clinical features and diagnosis	443
Therapy and prognosis	445
References	445
Trichothiodystrophy	446
Epidemiology and etiology	446
Clinical features and diagnosis	446
Therapy and prognosis	447
References	447
Uncombable hair syndrome (pili trianguli et canaliculi).....	448
Epidemiology and etiology	448
Clinical features and diagnosis	448
Therapy and prognosis	448
References	450
Woolly hair	451
Epidemiology	451
Etiology, clinical features and diagnosis	451
Therapy and prognosis	451
References	451
Trichorrhexis invaginata	454
Epidemiology and etiology	454
Clinical features and diagnosis	454
Therapy and prognosis	454
References	456
Hypertrichosis	457
Epidemiology and etiology	457
Clinical features and diagnosis	457
Therapy and prognosis	459
References	459
Abnormalities of hair color	460
Premature greying of hair	462
Epidemiology and etiology	462
Clinical features and diagnosis	462
Therapy and prognosis	462
Poliosis	464
Epidemiology and etiology	464
Therapy and prognosis	465
References	466
Alopecia areata	468
Epidemiology and etiology	468
Clinical features and diagnosis	468
Differential diagnosis	469
Therapy and prognosis	469
References	470
Trichotillomania	471
Epidemiology and etiology	471
Clinical features and diagnosis (also including laboratory or dermoscopy)	471
Differential diagnosis	471
Therapy and prognosis	473
References	473

Loose anagen hair syndrome	475	DISORDERS	505
Epidemiology and etiology	475	Fox Fordyce disease	506
Clinical features and diagnosis	475	Epidemiology and etiology	506
Differential diagnosis	476	Clinical features and diagnosis	506
Therapy and prognosis	476	Differential diagnosis	506
References	476	Therapy and prognosis	506
Folliculitis decalvans	477	References	506
Epidemiology and etiology	477	Hidradenitis suppurativa (HS)	508
Clinical features and diagnosis	477	Epidemiology and etiology	508
Differential diagnosis	477	Clinical features and diagnosis	508
Therapy and prognosis	477	Differential diagnosis	508
References	478	Therapy and prognosis	508
Acquired scarring alopecias	479	References	508
Chapter 20		Aquagenic keratoderma	510
NAIL DISORDERS	481	Epidemiology and etiology	510
Nail Disorders	481	Clinical features and diagnosis	510
Introduction	481	Differential diagnosis	510
Epidemiology	481	Therapy and prognosis	510
Clinical features	482	References	510
Physiological aspects of the nail in the pediatric population	482	Miliaria	512
Nail changes that appear in newborns and infants (<12 months): congenital and hereditary conditions	484	Epidemiology and etiology	512
Nail-patella syndrome	484	Clinical features and diagnosis	512
Ectodermal dysplasias	485	Differential diagnosis	512
Epidermolysis bullosa	485	Therapy and prognosis	512
Pachyonychia congenita (PC)	486	References	512
Dyskeratosis congenita (DC)	486	Pitted keratolysis	514
Nail changes usually observed in small and preschool-age children (1-5 years)	487	Epidemiology and etiology	514
Beau's lines and onychomadesis	487	Clinical features and diagnosis	514
Thumb sucking and onychophagy	489	Differential diagnosis	514
Blistering distal dactylitis	490	Therapy and prognosis	514
Herpes simplex	490	References	514
Paronychia	490	Palmoplantar hidradenitis	515
Nail warts	491	Epidemiology and etiology	515
Nail changes in children of scholar age (6-12 years): inflammatory conditions of the nails	491	Clinical features and diagnosis	515
Nail psoriasis	491	Differential diagnosis	515
Pustular parakeratosis	493	Therapy and prognosis	515
Lichen planus of the nail	493	Diseases of the sebaceous glands	516
Lichen striatus of the nail	493	Acne	516
Trachyonychia or twenty-nail dystrophy ..	494	Neonatal acne	518
Nail changes in teenagers (> 12-18 years): onychomycosis, ingrown nails and benign tumors	495	Infantile acne	518
Onychomycosis	495	Acne in childhood	520
Fibrokeratoma	496	Prepuberal acne	520
Subungual exostosis	497	References	521
Ingrown toenail in children	498	Chapter 22	
Melanonychia in children	500	GENODERMATOSES	523
References	502	Acrodermatitis enteropathica	523
Chapter 21		Epidemiology and etiology	523
SEBACEOUS AND SWEAT GLANDS		Clinical features and diagnosis	523
		Differential diagnosis	524
		Therapy and prognosis	524
		References	525
		Cutis laxa	526
		Epidemiology and etiology	526
		Clinical features and diagnosis	526
		Differential diagnosis	526
		Therapy and prognosis	526
		References	526

Darier's disease	529	Keratinopathic ichthyosis	567
Epidemiology and etiology	529	Epidemiology and etiology	567
Clinical features and diagnosis	529	Clinical features and diagnosis	567
Differential diagnosis	529	Differential diagnosis	569
Therapy and prognosis	531	Therapy and prognosis	569
References	531	References	569
Ehlers-Danlos Syndrome	532	Netherthon Syndrome	570
Epidemiology and etiology	532	Epidemiology and etiology	570
Clinical features and diagnosis	532	Clinical features and diagnosis	570
Differential diagnosis	532	Differential diagnosis	570
Therapy and prognosis	532	Therapy and prognosis	570
References	532	References	571
Epidermolytic Verruciformis	535	Trichothiodystrophy	572
Epidemiology and etiology	535	Epidemiology and etiology	572
Clinical features and diagnosis	535	Clinical features and diagnosis	572
Differential diagnosis	536	Differential diagnosis	572
Therapy and prognosis	536	Therapy and prognosis	573
References	536	References	573
Epidermolysis bullosa	537	Lipoid proteinosis	574
Epidemiology and etiology	537	Epidemiology and etiology	574
Clinical features and diagnosis	537	Clinical features and diagnosis	574
Junctional epidermolysis bullosa	538	Differential diagnosis	574
Dystrophic epidermolysis bullosa	541	Therapy and prognosis	575
Kindler's syndrome	545	References	575
Therapy and prognosis	550	Hypopigmentary mosaicism	576
References	547	Epidemiology and etiology	576
Gorlin Syndrome	548	Clinical features and diagnosis	576
Epidemiology and etiology	548	Differential diagnosis	578
Clinical features and diagnosis	548	Therapy and prognosis	578
Differential diagnosis	550	References	578
Therapy and prognosis	550	Neurofibromatosis type 1 (NF1)	579
References	550	Epidemiology and etiology	579
Incontinentia pigmenti	551	Clinical features and diagnosis	579
Epidemiology and etiology	551	Differential diagnosis	579
Clinical features and diagnosis	551	Therapy and prognosis	579
Differential diagnosis	555	References	579
Therapy and prognosis	555	Omenn syndrome	581
References	555	Epidemiology and etiology	581
Focal dermal hypoplasia	556	Clinical features and diagnosis	581
Epidemiology and etiology	556	Differential diagnosis	581
Clinical features and diagnosis	556	Therapy and prognosis	581
Differential diagnosis	556	References	581
Therapy and prognosis	556	Oral-facial-digital syndrome (OFDS)	583
References	556	Epidemiology and etiology	583
Ichthyoses	559	Clinical features and diagnosis	583
Autosomal recessive congenital ichthyosis (ARCI)	559	Differential diagnosis	583
Epidemiology and etiology	559	Therapy and prognosis	583
Clinical features and diagnosis	559	References	583
Differential diagnosis	559	Pachyonychia congenita	585
Therapy and prognosis	559	Epidemiology and etiology	585
References	563	Clinical features and diagnosis	585
X-linked ichthyosis	564	Differential diagnosis	585
Epidemiology and etiology	564	Therapy and prognosis	585
Clinical features and diagnosis	564	References	585
Differential diagnosis	564	Xeroderma pigmentosum	588
Therapy and prognosis	565	Epidemiology and etiology	588
References	566	Clinical features and diagnosis	588

Therapy and prognosis	588
References	590
SKIN AND SYSTEMIC DISEASES	
Chapter 23	
DERMATOSSES ASSOCIATED WITH SYSTEMIC DISEASES	593
Kawasaki's disease	593
Epidemiology and etiology	593
Clinical features and diagnosis.....	593
Differential diagnosis.....	597
Therapy and prognosis	597
References	597
Henöch-Schonlein purpura	599
Epidemiology and etiology	599
Clinical features and diagnosis.....	599
Differential diagnosis.....	599
Therapy and prognosis	601
References	601
Systemic lupus erythematosus	602
Epidemiology and etiology	602
Clinical features and diagnosis	602
Differential diagnosis.....	604
Therapy and prognosis	604
References	604
Neonatal lupus erythematosus.....	605
References	605
Juvenile dermatomyositis	606
Epidemiology and etiology	606
Clinical features and diagnosis	606
Differential diagnosis.....	607
Therapy and prognosis	607
References	607
Morphea	609
Epidemiology and etiology	609
Clinical features and diagnosis.....	609
Differential diagnosis.....	612
Therapy and prognosis	612
References	612
Chapter 24	
DERMATITIS ARTEFACTA.....	613
Epidemiology and etiology	613
Clinical features and diagnosis.....	613
Therapy and prognosis	616
References	616
Index	617

Authors

AURORA ALESSANDRINI

UO Dermatologia, Dipartimento di Medicina Clinica, Specialistica e Sperimentale, Università di Bologna

ORSOLA AMETRANO

Dermatologia Pediatrica, Dipartimento di Pediatria Sistematica e Specialistica, AORN Santobono-Pausilipon, Napoli

GIUSEPPE ARGENZIANO

Unità di Dermatologia, Università della Campania “Luigi Vanvitelli”, Napoli

ANDREA BASSI

UOS Dermatologia - Lucca - Azienda USL Toscana Nordovest

GABRIELLA BRANCACCIO

Unità di Dermatologia, Università della Campania “Luigi Vanvitelli”, Napoli

GIULIA BRIATICO

Unità di Dermatologia, Università della Campania “Luigi Vanvitelli”, Napoli

MARCO ADRIANO CHESSA

UO Dermatologia, Dipartimento di Medicina Sperimentale, Diagnostica e Specialistica, Università di Bologna

MARIO CUTRONE

Ambulatorio di Dermatologia Pediatrica, Ospedale dell’Angelo Venezia, Ospedale San Bortolo, Vicenza

EUGENIA VERONICA DI BRIZZI

Unità di Dermatologia, Università della Campania “Luigi Vanvitelli”, Napoli

AMBRA DI ALTOBRANDO

UO Dermatologia, Dipartimento di Medicina Sperimentale, Diagnostica e Specialistica, Università di Bologna

ANTIMO DI MARTINO

Unità di Dermatologia, Università della Campania “Luigi Vanvitelli”, Napoli

ANDREA DIOCIAIUTI

UOC di Dermatologia, Ospedale Pediatrico Bambino Gesù, IRCCS, Roma

MAYA EL HACHEM

UOC di Dermatologia, Ospedale Pediatrico Bambino Gesù, IRCCS, Roma

FEDERICA FILIPPI

UO Dermatologia, Dipartimento di Medicina Sperimentale, Diagnostica e Specialistica, Università di Bologna

CARLOTTA GURIOLI

UO Dermatologia, Dipartimento di Medicina Clinica, Specialistica e Sperimentale, Università di Bologna

ROSSELLA LACAVA

UO Dermatologia, Dipartimento di Medicina Sperimentale, Diagnostica e Specialistica, Università di Bologna

CARLO MAZZATENTA

UO Dermatologia Lucca- Azienda USL Toscana Nordovest, Italy

ELVIRA MOSCARELLA

Clinica Dermatologica dell'Università della Campania, Napoli

IRIA NERI

UO Dermatologia, Dipartimento di Medicina Clinica, Specialistica e Sperimentale, Università di Bologna

ANNALISA PATRIZI

UO Dermatologia, Dipartimento di Medicina Clinica, Specialistica e Sperimentale, Università di Bologna

VINCENZO PICCOLO

Unità di Dermatologia, Università della Campania “Luigi Vanvitelli”, Napoli

ALESSANDRO PILERI

UO Dermatologia, Dipartimento di Medicina Sperimentale, Diagnostica e Specialistica, Università di Bologna

BIANCA MARIA PIRACCINI

UO Dermatologia, Dipartimento di Medicina Clinica, Specialistica e Sperimentale, Università di Bologna

TERESA RUSSO

Unità di Dermatologia, Università della Campania “Luigi Vanvitelli”, Napoli

FRANCESCO SAVOIA

UO Dermatologia, Dipartimento di Medicina Sperimentale, Diagnostica e Specialistica, Università di Bologna

ANDREA SECHI

UO Dermatologia, Dipartimento di Medicina Sperimentale, Diagnostica e Specialistica, Università di Bologna

MICHELA STARACE

UO Dermatologia, Dipartimento di Medicina Clinica, Specialistica e Sperimentale, Università di Bologna

FEDERICO TARTARI

UO Dermatologia, Dipartimento di Medicina Sperimentale, Diagnostica e Specialistica, Università di Bologna

ELISABETTA VENTURINI

SOC Malattie Infettive, AOU Meyer, Firenze

ANNALUCIA VIRDI

UO Dermatologia, Dipartimento di Medicina Sperimentale, Diagnostica e Specialistica, Università di Bologna