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GOODHEART'S PHOTOGUIDE TO COMMON PEDIATRIC AND ADULT SKIN DISORDERS

Fourth Edition



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Wolters Kluwer

Goodheart's Photoguide to Common Pediatric and Adult Skin Disorders

Diagnosis and Management

FOURTH EDITION

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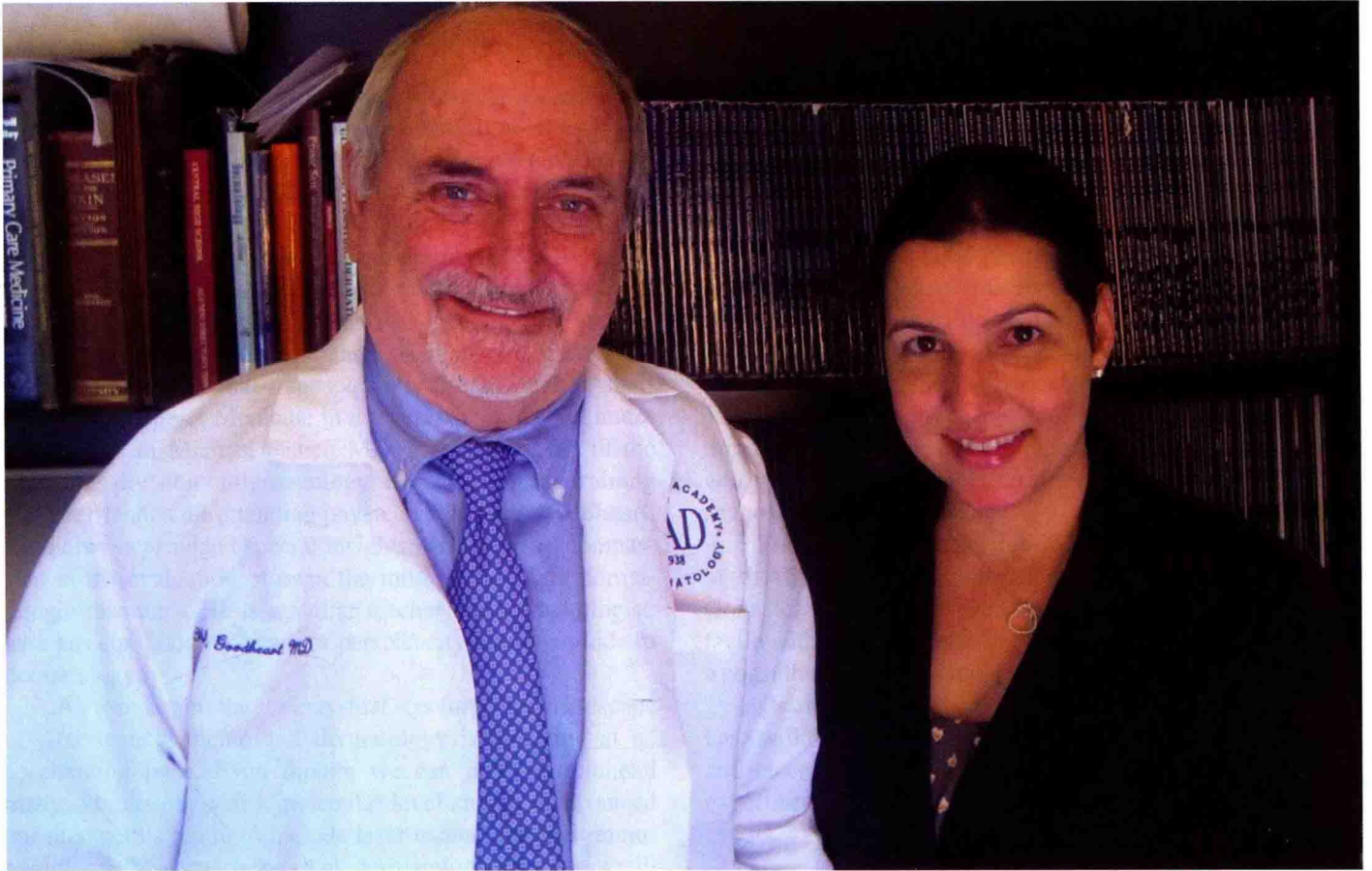
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Herbert P. Goodheart, MD and Mercedes E. Gonzalez, MD

To our families, Karen and David, & Rogerio, Rogie and Maggie, who have provided immense support and encouragement throughout.

Herbert P. Goodheart, MD
Mercedes E. Gonzalez, MD

What the mind
does not know,
the eyes cannot see.
ANCIENT PROVERB

Foreword

As a second-year medical student, I recall studying cardiology one evening when my brother Andrew asked me to look at a rash that developed on his trunk. I did not have a clue as to how to make *any* dermatologic diagnosis. So, after Andrew accused my father of wasting tuition money on my evidently inadequate education, I thought it proper to register for a dermatology elective in my fourth year. I reasoned that, regardless of whatever field I would ultimately choose, I would inevitably be confronted with some cutaneous dilemmas. It was with tremendous fortune that I subsequently trained at the Albert Einstein College of Medicine in the Bronx, New York, under the tutelage of Michael Fisher, MD, the former head of the illustrious division of dermatology. It was during my training that I befriended the attending physician, Dr. Herb Goodheart. Herb always provided special insights, wisdom, and compassion in the evaluation of even the most rudimentary dermatologic disorders. He is a stellar teacher and dermatologist, who has compiled his years of perspicacity into this guide to dermatology.

As we begin the twenty-first century, the landscape of American medicine and dermatology is changing at an accelerating pace. Even though we can now comprehend many skin disorders at a molecular level and have advanced our therapeutic realm to include laser technology and immunobiology, the cornerstone of all dermatologic endeavors will always be careful clinical observation. As venues of practice shift toward a greater proportion of primary dermatologic care being delivered by nondermatologists, resources for these providers must be accessible, comprehensible, and practical.

Dr. Goodheart's guide to dermatology is divided into common disorders, the interrelationship between the skin and systemic diseases, basic and advanced dermatologic procedures, and a very useful appendix that provides patient handout material in both English and Spanish. Importantly, it combines features of an atlas with Herb's pithy perspectives, as though he is standing over your shoulder in the dermatology clinic. I am pleased to see that this fourth edition of Goodheart's has Dr. Mercedes E. Gonzalez contributing her considerable knowledge of pediatric dermatology and pediatrics. I am certain that such an addition will be an invaluable tool to help clinicians navigate through the various dermatologic disorders of all ages and will make it an invaluable resource for pediatricians as well as those in primary care.

Those who use this guide will come to appreciate many of the finer points and opinions that Drs. Goodheart and Gonzalez provide and even more so when becoming more facile with the discipline. Use this guide as a primer, an atlas, a consultant, and as a supplement to more in-depth dermatology texts and medical literature. Your dermatologic knowledge base will flourish, your appreciation of the field will blossom, and most importantly, your patients will benefit from your expertise.

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Preface

Dr. Mercedes E. Gonzalez, board certified in pediatric dermatology, dermatology and pediatrics, has joined me in writing this expanded 4th edition, now retitled “Goodheart’s Photoguide to Common Adult and Pediatric Skin Disorders: Diagnosis and Management.”

Herbert P. Goodheart, MD

Our goal is to provide a comprehensive approach to the diagnosis and care of common skin disorders for patients of all ages. We have tried to make this the most practical resource for dermatologists, dermatology residents, medical students, residents in various areas of medicine, practicing physicians, physician assistants, nurse practitioners, and the general population i.e., anyone that encounters disorders of the skin.

Eleven new chapters: Birthmarks, Neonatal and Infantile Eruptions, Acne, Eczema, Superficial Bacterial Infections, Superficial Viral Infections, Viral & Bacterial Exanthems,

Lumps, Bumps and Linear Eruptions, Hair and Nail Disorders, Cutaneous Manifestations of Systemic Disease and Neurocutaneous Syndromes have been added.

In addition to the new chapters on pediatric dermatology, the book has been further enlarged to encompass a wider assortment of cutaneous disorders. The book now includes presentations of disorders in racially and ethnically diverse populations and in the aging population, who are now presenting with a greater incidence of pre-cancers, basal cell and squamous cell carcinomas, melanoma, as well as rare skin cancers such as Merkel cell carcinoma.

The content has been updated to remain current and the formularies contain the latest in over-the-counter and prescription medications. We have also included many of the recent “biologics” that have become exciting tools for the targeted treatment of many immunologic and neoplastic disorders in dermatology.

Herbert P. Goodheart, MD and Mercedes E. Gonzalez, MD

Acknowledgments

We owe a great deal of gratitude to the team with which we worked who made the writing of this fourth edition a truly gratifying and enjoyable experience.

It began with Kristina Oberle and Rebecca Gaertner who had the foresight and determination to take on the project, followed by Kel McGowan who took over as acquisition editor and carried it over the finish line.

Other key players include:

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We are especially indebted to Kristina Oberle, our developmental editor, who kept track of a stream of disconnected material and buttoned up so many loose ends. Kristina's attention to detail and her availability to answer a multitude of questions has brought this complicated project to completion.

Thanks again to Peter Burk, Mary Ruth Buchness, and Ken Howe who were contributors to the first three editions.

This project never would have been realized without the initial foresight of Sonya Seigafuse who contributed to the second and third editions and was the catalyst for this fourth edition of our book.

Our art director, Larry Pezzato who focused on the illustrations and the processing of digital images, has been an essential contributor to this book, a book that depends on images.

Muchas gracias to Marcos and Rosa Sastre, who supplied the Spanish translations on some of the new handouts.

For this fourth edition, my appreciation also goes to Ashit Mahar and Ben Barankin for their excellent clinical

photographs and to Ross Levy, whose advice about wound healing has been a great addition; his hands and surgical skills are featured more than once in this book.

Thanks go to the "brain trust" of many colleagues at Derm-Chat/Derm-Rx, who kept us up-to-date on the latest diagnostic and therapeutic issues in dermatology. Art Huntley who founded and Haines Ely carried on with this valuable online resource. Also thanks to Pam Basuk who has taken on the mantle. To the heavy posters—Joe Eastern, Jerry Bock, Diane Thaler, Pat Condry, Kevin Smith, Linda Spencer, Steve Stone, Gail Drayton, Steve Emmet, Ashit Mahwar, Otto Bastos, Bob Rudolph, Sahar Ghannam, Larry Finkel, Bill Danby, Lynn Margesson, Sate Hamza, Noah Scheinfeld, Steve Feldman, Bernie Recht, Barry Ginsberg, Bill Smith, Pierre Jaffe, Omid Zargari, Becky Bushong, Thomas Vaughn, Ed Zabawski, Jerry Litt, JoBohanon-Grant, Ben Treen, Rhett Drugge, Catelin Popescu, Lennie Rosmarin, Jo Herzog, Peter Panagotacos, Nejib Doss Koushik Lahiri, Emily Altman, Chuck Fishman, Susan Bushelman, Orin Goldblum, Robin Berger, Maida Burrow, Stu Kittay, Diane Davidson, Chuck Miller, Norm Guzik, Walter Wood, Sandeep Gupta, Alice Do, and many, many others who are too numerous to mention. You have been our "online classmates and teachers." We thank you all.

Dr. Gonzalez would like to acknowledge her mentors in pediatric dermatology whose tutelage, guidance, and pearls of wisdom aided in the writing of the pediatric section. Specifically, Julie V. Schaffer, Seth J. Orlow, Harper Price, Helen T. Shin, Lawrence Schachner, Maria C. Garzon, and Miguel R. Sanchez have been important mentors.

We are immensely pleased with the superb job our publisher Wolters Kluwer Health has done in producing this edition.

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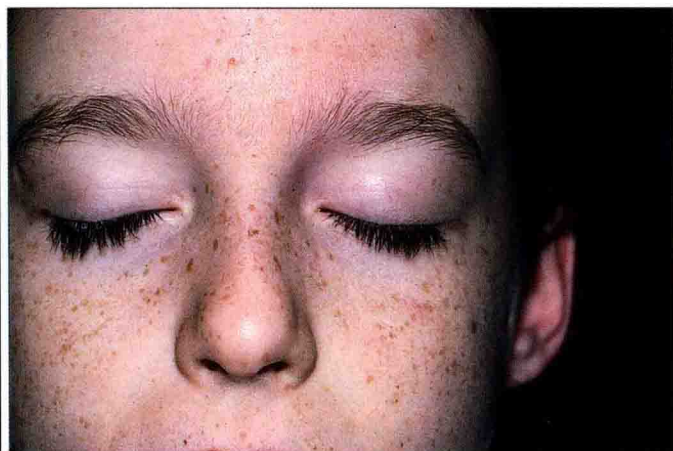
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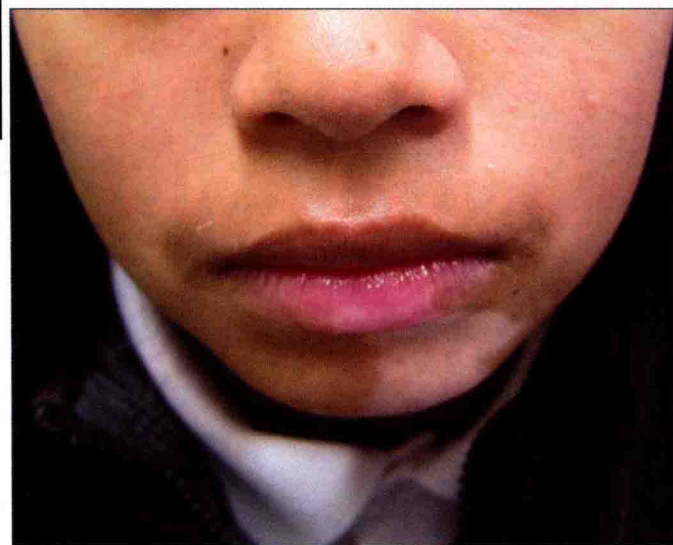
INTRODUCTION

Illustrated Glossary of Basic Skin Lesions Topical Therapy

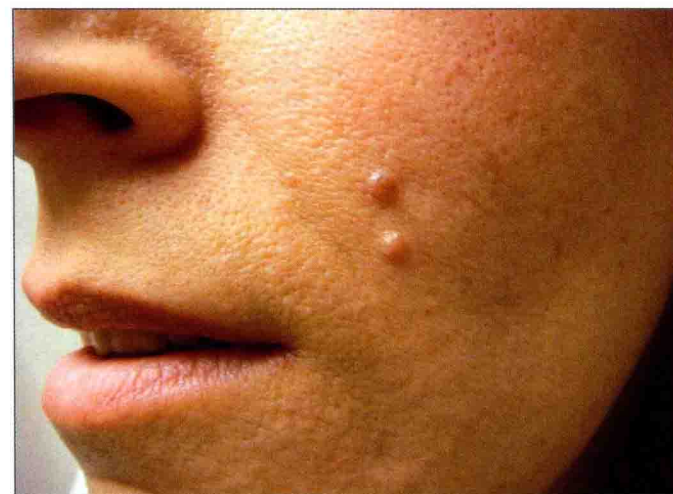
Illustrated Glossary of Basic Skin Lesions



Macule. Freckles (ephelides).



Patch. Vitiligo.



Papule. Melanocytic nevi (moles).

PRIMARY LESIONS

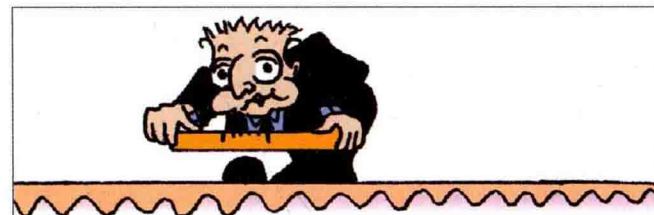


Macules are small, flat, nonpalpable skin lesions (you cannot feel macules, if you close your eyes, they “disappear”). They occur in various colors, shapes, and sizes.

Examples: tattoos, flat nevi, postinflammatory hyperpigmentation, postinflammatory hypopigmentation, erythema, purpura, and freckles.

Patches are large macules. There is some confusion regarding patches; some dermatologists refer to a patch as a large macule, whereas others refer to patches as macules with overlying fine scale (e.g., the scaly patches seen in pityriasis rosea and tinea versicolor).

Examples: melasma and vitiligo.



Papules are small, solid elevations with no visible fluid. Papules can vary in shape, color, and size from pinhead-sized up to 1 cm in diameter. They may be flat-topped (planar), umbilicated (e.g., molluscum contagiosum), yellowish (e.g., xanthoma), or brown/black (e.g., dermal nevus).

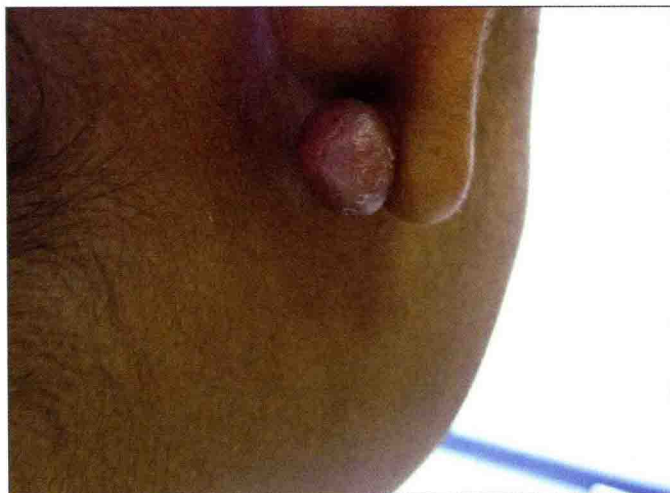
Examples: molluscum contagiosum, warts, and palpable nevi (moles).

Note: “*Maculopapule*” is a contradiction in terms, and the use of this term should be abandoned. An eruption may be described as being macular and papular, rather than “maculopapular.” Preferably, the term, “morbilliform” (measles-like) should be used.



Nodules are firm, solid palpable lesions that are generally greater than 1 cm in diameter. They may be seen as elevated lesions or, if deeper, can be palpated without any elevation of the skin (subcutaneous nodules such as cysts and lipomas).

Examples: erythema nodosum, lipoma, pyogenic granuloma, rheumatoid nodules, basal cell carcinoma, squamous cell carcinoma, and keloids.



Nodule. Keloid.



Vesicles (small blisters) are clear, fluid-filled lesions generally 1 cm or less in diameter.

Examples: herpes simplex, acute vesicular tinea pedis, and early chickenpox.



Vesicle. Chickenpox.

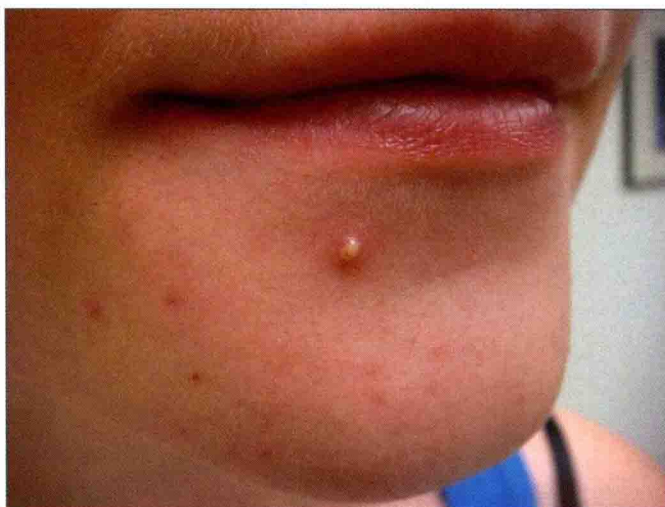


Bullae (large blisters) are clear, fluid-filled lesions generally 1 cm or more in diameter.

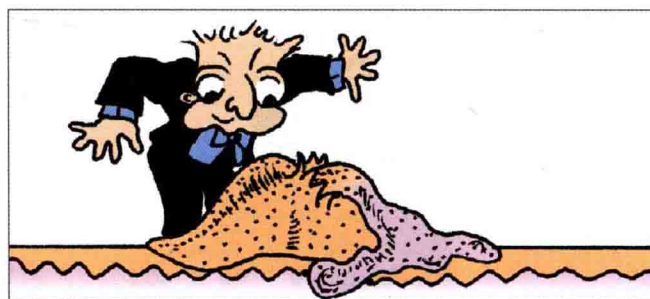
Examples: second-degree burns, herpes zoster, and insect bite reactions.



Bulla. Bullous insect bite reaction.



Pustule. Acne pustule.



Pustules are raised, circumscribed, superficial lesions that contain purulent, cloudy material.

Examples: evolving chickenpox, folliculitis, and pustular acne.



Plaque. Psoriasis vulgaris.



Plaques are well-circumscribed, elevated, or depressed (*atrophic*), plateau-like lesions that are usually >1 cm. They may arise from papules that coalesce or they may arise *de novo*. Crust and scale are commonly present.

Examples: chronic eczematous dermatitis and psoriasis.



Atrophic plaque. Multiple atrophic plaques of lichen planus.



Atrophic plaques result from a thinning process that is associated with a decreased number of cutaneous cells, often with a loss of normal skin markings. Dermal atrophy may result in a depression of the skin.

Examples: discoid lupus erythematosus, morphea (localized scleroderma), atrophy caused by intralesional cortisone injections, and atrophic lichen planus.



Wheals are raised, flesh-colored or erythematous papules or plaques that are transient. They last less than 24 hours, and later reappear with a different shape, size, and location.

Examples: urticaria (hives) and angioedema.

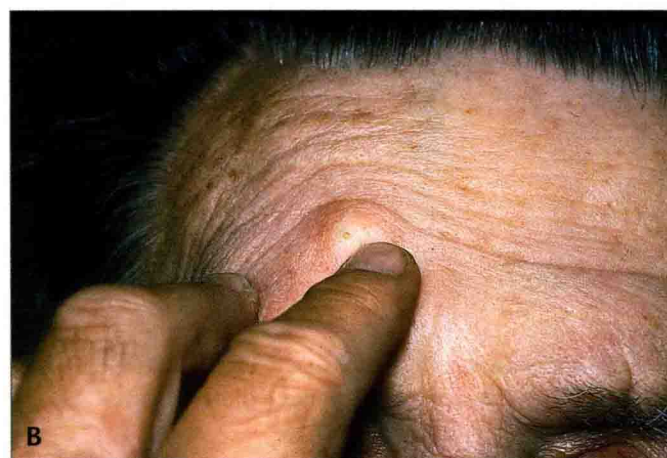
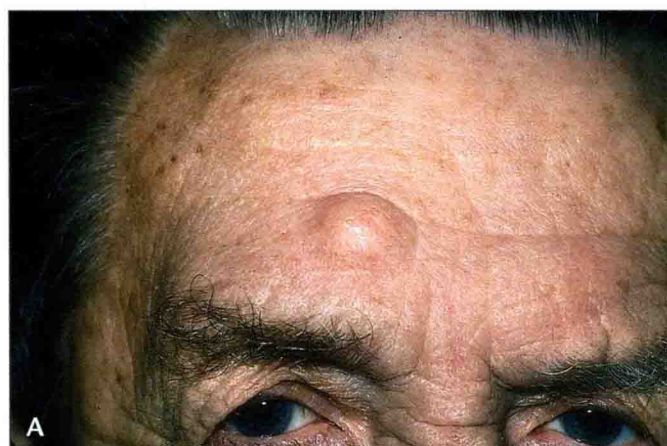


Wheal. Urticaria.



Cysts are walled-off, ballotable lesions containing fluid or semisolid material. (They feel like an eyeball when palpated.)

Examples: pilar and epidermoid cysts.



Cyst. Epidermoid cyst.

SECONDARY (MODIFIED) LESIONS

Secondary features on primary lesions may evolve naturally or develop as a result of patient manipulation.



Scale. Dandruff.



Scales (desquamation) comprise the outer layer of epidermis that normally desquamates or sheds imperceptibly on a daily basis. In many dermatologic conditions, when this shedding becomes visible, it is then considered to be abnormal. Visible scale is the result of increased production of corneocytes or delayed desquamation.

Examples of conditions that commonly produce scale are psoriasis, dandruff, xerosis, and ichthyosis.

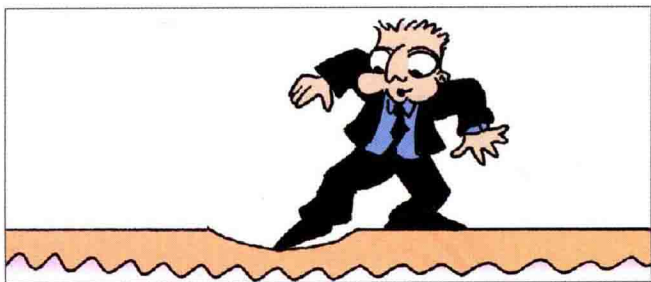


Crust. Bullous impetigo with "honey-colored" crusts.



Crusts (scabs) are formed from blood, serum, or other dried exudate. "Honey-colored crusts" (*impetiginization*) are often a sign of superficial bacterial infection.

Examples: excoriated or infected insect bites and evolving lesions of bullous impetigo.



Erosions are shallow losses of tissue involving only the epidermis ("topsoil"). They often result from blisters and pustules and usually heal without scarring.

Examples: secondary lesions of herpes simplex, herpes zoster, and aphthous stomatitis.



Erosion. Grouped erosions of resolving herpes simplex.



Ulcers are defects deeper than erosions. Ulcers involve complete loss of the epidermis as well as the dermis or deeper layers. They usually heal with scarring.

Examples: pyoderma gangrenosum, venous stasis ulcers, and vasculitis.



Ulcer. Ulcerated infantile hemangioma.



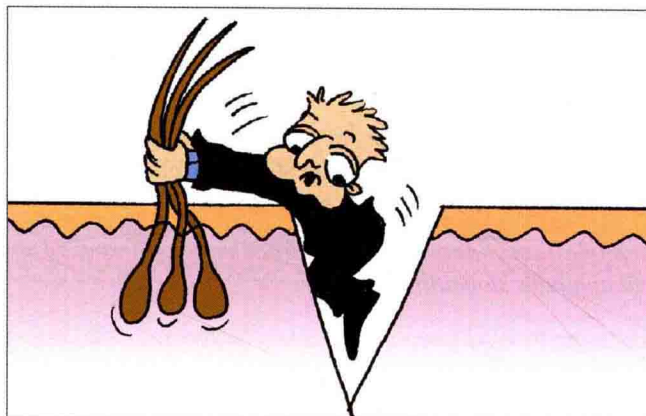
Fissure. Hand eczema.



Excoriation. Punctate and linear lesions from scratching.

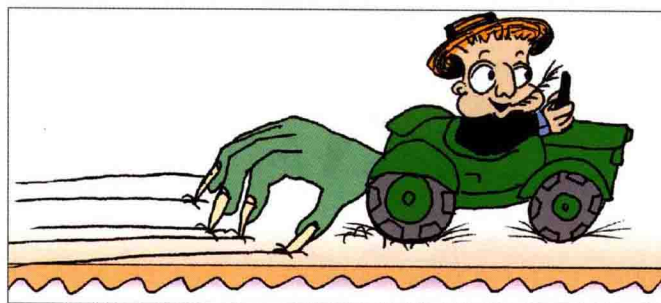
Fissures are small, linear ulcers or cracks in the skin. They are often painful.

Examples of conditions in which fissures may be seen: angular stomatitis (perlèche), eczema of the lips, and eczematous dermatitis of the fingers.



Excoriations are linear or punctate erosions or excavations induced by scratching, picking, or digging.

Examples: insect bites, cat scratches, and self-induced lesions.



REACTION PATTERNS, SHAPES, AND CONFIGURATIONS

Diseased skin has a limited number of clinical manifestations. Many skin disorders tend to occur in characteristic shapes, distributions, arrangements, and reaction patterns that often serve as diagnostic clues.

REACTION PATTERNS

The convention of describing skin disorders in terms of certain reaction patterns is inexact and there is often a great deal of overlap. For example, the blistering acute eruption of poison ivy can be described as both a vesicobullous as well as an acute eczematous reaction pattern. However, using these patterns to describe individual skin lesions or eruptions often helps greatly in formulating a differential diagnosis.

A **papulosquamous reaction pattern** refers to an eruption in which the primary lesions consist of macules, papules, or plaques with scale. Thus, a papulosquamous reaction pattern suggests a differential diagnosis that includes psoriasis, tinea corporis, tinea versicolor, lichen planus, parapsoriasis, mycosis fungoides, and pityriasis rosea.



Papulosquamous reaction pattern. Psoriasis.



Papulosquamous reaction pattern. Pityriasis rosea.

Eczematous reaction patterns are a little more difficult than papulosquamous patterns to describe (see Chapters 4 and 13), because they often have various presentations and, at times, may be impossible to distinguish from papulosquamous patterns.

- **Acute and subacute eczema.** Examples include erythematous “juicy” papules or plaques and/or weeping vesicobullous lesions. A classic example is poison ivy.



Acute eczematous reaction pattern. Poison ivy. Note “honey-colored” (impetiginized) vesicobullous fluid.