of groups of macules of varied size and color with a fine peripheral scale.

MORPHOLOGY

The histologic features of dermatophytoses are variable, depending on the properties of the organism, the host response, and the degree of bacterial superinfection. There may be mild eczematous dermatitis associated with intraepidermal neutrophils (Fig. 25-40*B*). Due to cell walls rich in mucopolysaccharides, fungi stain bright pink to red with periodic acid–Schiff stain. They are found in the anucleate cornified layer of lesional skin, hair, or nails (Fig. 25-40*B*, *inset*). Culture of material scraped from these areas usually permits the identification of the offending species.

SUGGESTED READINGS

Melanoma and Dysplastic Nevi

Breslow A: Prognosis in cutaneous melanoma: tumor thickness as a guide to treatment. *Pathol Annu* 15:1, 1980. *[Paper describing the importance of vertical growth of melanoma, which remains the best predictor of outcome in this disease.]*

Clark WH Jr, Remmer RR, Greene M, et al: Origin of familial malignant melanomas from heritable melanocytic lesions. "The B-K mole syndrome." *Arch Dermatol* 114:732, 1978. *[Classic paper describing familial dysplastic nevi and their possible relationship to melanoma.]*

Elder DE: Dysplastic nevi: an update. *Histopathology* 56:112, 2010. *[Updated discussion of the histology and pathogenesis of dysplastic nevi and their relationship to melanoma.]*

Horn S, Figl A, Rachakonda PS, et al: TERT promoter mutations in familial and sporadic melanoma. *Science* published on-line on 1/24/2013.

Huang FW, Hodis E, Xu MJ, et al: Highly recurrent TERT promoter mutations in human melanoma. *Science* published on-line on 1/24/2013. *[Two landmark papers documenting frequent mutations in the promoter of the gene encoding the catalytic subunit of telomerase in melanoma.]*

Ibrahim N, Haluska FG: Molecular pathogenesis of cutaneous melanocytic neoplasms. *Annu Rev Pathol* 4:551, 2009. *[The genetic pathways relevant to melanoma suggest future therapeutic interventions.]*

Mellman I, Coukos G, Dranoff G: Cancer immunotherapy comes of age. *Nature* 480:480, 2012. *[Update on exciting progress in treating melanoma with immunotherapeutic agents.]*

Ribas A, Flaherty KT: BRAF targeted therapy changes the treatment paradigm in melanoma. *Nat Rev Clin Oncol* 8:426, 2011. *[Impact of inhibitors of mutated BRAF kinase on treatment of melanoma.]*

Epidermal Skin Tumors

Epstein EH: Basal cell carcinomas: attack of the hedgehog. *Nat Rev Cancer* 8:743, 2008. *[Epidemiology, clinical presentation, molecular pathogenesis, and novel treatment options are succinctly reviewed.]*

Hafner C, Hartmann H, Vogt T, et al: High frequency of FGFR3 mutations in adenoid seborrheic keratoses. *J Invest Dermatol* 126:2404, 2006. *[Description of activating mutations in FGFR3 in seborrheic keratoses.]*

Ratushny V, Gober MD, Hick R, et al: From keratinocyte to cancer: the pathogenesis and modeling of cutaneous squamous cell carcinoma. *J Clin Invest* 112:464, 2012. *[Discussion of clinical and molecular features of cutaneous neoplasia and experimental approaches used to study this disease.]*

Mastocytosis and Cutaneous T Cell Lymphoma

George TI, Horny HP: Systemic mastocytosis. *Hematol Oncol Clin North Am* 25:1067, 2011. *[Discussion of clinical features, diagnosis, pathogenesis, and treatment of systemic mast cell disease.]*

Wong HK, Mishra A, Hake T, et al: Evolving insights into the pathogenesis and therapy of cutaneous T-cell lymphoma (mycosis fungoides and Sezary syndrome). *Br J Haematol* 155:150, 2011. *[A summary of the epidemiology, staging, natural history, and immunopathogenesis of cutaneous T-cell lymphoma.]*

Autoimmune and Inflammatory Skin Disorders

Coenraads PJ: Hand eczema. *N Eng J Med* 367:1829, 2012. *[A thorough discussion of the causes and management of a common form of eczema.]*

Nestle FO, Kaplan DH, Barker J: Psoriasis. *N Engl J Med* 361:496, 2009. *[Pathogenesis, clinical features, and targeted treatment options are discussed.]*

Schaefer P: Urticaria: evaluation and treatment. *Am Fam Physician* 83:1078, 2011. [A practical discussion of the clinical evaluation and treatment of urticaria.]

Sharma A, Bialynicki-Birula R, Schwatz RA, et al: Lichen planus: an update and review. *Cutis* 90:17, 2012. *[Review of pathology and clinical features, natural history, and treatment.]*

Blistering Disorders

Bonciani D, Verdelli A, Bonciolini V, et al: Dermatitis herpetiformis: from genetics to the development of skin lesions. *Clin Dev Immunol* 2012, in press. *[Description of factors and disease mechanisms underlying this rare disorder.]*

Ujiie H, Shibaki A, Nishie W, et al: What's new in bullous pemphigoid. *J Dermatol* 37:194, 2010. *[Review of bullous pemphigoid pathogenesis.]*

Yokoyama T, Amagai M: Immune dysregulation of pemphigus in humans and mice. *J Dermatol* 37:205, 2010. *[Review of immune disturbances that may underlie pemphigus.]*

Disorders of Skin Appendages and Subcutis

Knutsen-Larson S, Dawson AL, Dunnick CA, et al: Acne vulgaris: pathogenesis, treatment, and needs assessment. *Dermatol Clin* 30:99, 2012. *[Review of the epidemiology, pathogenesis, and treatment of acne in the United States.]*

Nakatsuji T, Gallo RL: Antimicrobial peptides: old molecules with new ideas. *J Invest Dermatol* 132:887, 2012. *[Discussion of the possible role of antimicrobial peptides such as campthelicidin in rosacea, psoriasis, and atopic dermatitis.]*