

〈教育セミナー〉

皮膚の構造と機能

渡辺 晋一*

Structure and Function of Skin

Shinichi WATANABE*

Abstract

The skin is composed of three layers: the epidermis, the dermis, and the subcutaneous fat. The epidermis is composed of keratinocytes, Langerhans cells, melanocytes, and Merkel cells. The dermis, which is separated from the epidermis by a basement membrane, contains fibroblasts and highly dendritic cells, which express coagulation Factor XIIIa, mast cells, phagocytic and antigen-presenting macrophages, nerve fibers, and endothelial cells. Adipocytes predominate in subcutaneous fat. An equally important component of skin is adnexal epithelium, which consists of pilar and related sebaceous structures as well as apocrine and eccrine glands. Sebaceous glands lubricate the skin surface; apocrine glands are a source of protective and attractive scents, particularly in lower vertebrates; and eccrine glands are critical for temperature regulation.

Key words: epidermis, dermis, keratinocyte, melanocyte, Langerhans cell.