

〈教育セミナー〉

第48回教育セミナー (2023)・「皮膚を見る・観る・診る～最新の可視化技術レビュー～」

見・観・診られる皮膚の構造

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**Skin Structures That Can Be Seen, Observed, and Diagnosed**

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**Abstract**

The skin is the outermost layer covering the human body. It has an important function as a barrier and an organ in charge of immunity and is indispensable for maintaining life. The epidermal cells actively proliferate to keep the skin surface fresh, while the dermis, composed mainly of collagen and elastic fibers, helps maintain homeostasis. Skin changes observed with the naked eye always have corresponding microscopic and electron microscopic changes. Epidermal cell-cell junctions are mediated by structures called desmosomes, and epidermal-dermal adhesions are maintained by structures called hemidesmosomes. Acquired abnormalities in these structures can cause blistering within the epidermis or between the epidermis and dermis. Melanin pigment is synthesized by melanocytes. In vitiligo vulgaris, which is an acquired depigmentation disorder, a decrease or loss of melanocytes is observed, whereas in oculocutaneous albinism, which is an inherited depigmentation disorder, the number of melanocytes is normal but mature melanosomes are lost due to the dysfunction of melanin synthesis enzymes. Thus, the appearance of the skin is a manifestation of inner changes, and visualization of its structure and function is essential for the advancement of medicine and biology.

**Key words:** skin structure, light microscopy, electron microscopy.