

Treatment strategy for Riehl's melanosis

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Riehl's melanosis (RM) is a condition characterized by unknown causes that result in excessive pigmentation on the face, neck, and chest. It manifests as multiple small pigmented patches that may merge or exhibit a reticulated pattern. It can be preceded by dermatitis or occur without prior skin inflammation. Although the term is often used interchangeably with pigmented contact dermatitis, strict usage reserves the term "RM" when the causative allergen is unknown, while pigmented contact dermatitis is used when the allergen is identified. Various chemicals, including cosmetics, have been implicated as causative agents, and there has been increasing attention in the media regarding cases attributed to henna products in South Korea.

Histopathological findings in RM can vary depending on the causative agent, and the time elapsed since exposure. However, typical common findings include pigmentary incontinence, basal cell liquefaction and colloid bodies, suggesting lichenoid dermatitis. Spongiosis, although present, is distinct from typical eczematous lesions. Over time, melanophages can be observed around dermal blood vessels and on upper dermis, and these melanophages are found not only in macrophages but also in fibroblasts, suggesting their role in prolonged pigment retention.

Treatment of RM primarily involves identifying and removing the causative agent. In the initial stages, inflammation is frequently present. However, in cases where pigment and inflammation coexist and the patient is unaware of the inflammation, oral or topical corticosteroid therapy should precede laser treatment. Once inflammation has sufficiently subsided, various pigment laser treatments can be employed, including ND:Yag laser (Q-switched, picosecond) toning, alexandrite laser toning, and intense pulsed light therapy. Pulsed dye laser treatment for concurrent vascular dilation is often used in combination. Superficial chemical peeling using salicylic acid and glycolic acid is also utilized. The presenter prefers fractional thulium laser treatment over pigment laser toning and has reported cases demonstrating its effectiveness in patients who responded poorly to conventional laser toning. This lecture aims to enhance understanding of the characteristics of RM and discuss treatment principles.