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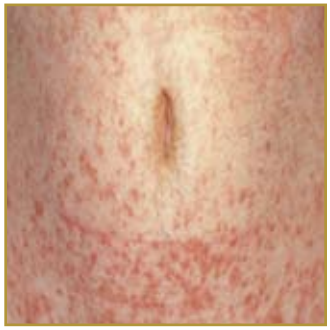
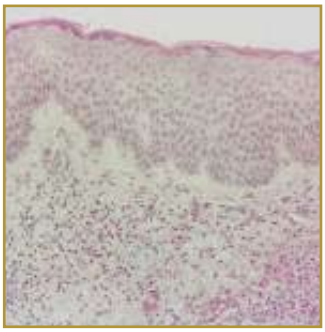
Drug-induced Photosensitivity





EPIDEMIOLOGY: Uncertain in the US, phototoxic reactions are considerably more common than photoallergic reactions.

ETIOLOGY: Prolonged sunexposure while on systemic medications or topically applied compounds

PATHOGENESIS: Manifested by a delayed erythema and edema, followed by hyperpigmentationand desquamation

CLINICAL: Often begins as an exaggerated sunburn.Vesicles and bullae may develop. Separation of the distal nail plate from the nail bed may also develop.

HISTOLOGY: In acute phototoxic reactions, necrotic keratinocytes are observed. If the reaction is severe, the necrosis is panepidermal. In photoallergic reactions, spongiosis with a dermal lymphocytic infiltrate is a prominent feature.

Drug-induced Photosensitivity refers to the development of a cutaneous disease resulting from both a chemical and light effect, exposure to only one component will not cause the disease. Both phototoxic and photoallergic reactions occur in sun-exposed areas of skin (e.g. the face, V of the neck, and dorsa of the hands and forearms). A widespread eruption suggests exposure to a systemic photosensitizer, whereas a localized eruption indicates a reaction to a locally applied topical photosensitizer. Treatments include topical corticosteroids and cool compresses to alleviate the condition, corticosteroids should be reserved for more severe cases. The drug classes that currently are eliciting a high level of adverse photosensitivity are the diuretic, antibacterial and nonsteroidal anti-inflammatory drugs (NSAIDs).

BIBLIOGRAPHY

1. “Photosensitivity Reactions” (Online) August 2007. http://www.merck.com/mmhe/sec18/ch214/ch214c.html (visited: March 16, 2008)
2. “Drug-Induced Photosensitivity” (Online). March 2007. http://www.emedicine.com/derm/topic108.htm#section (visited: March 16, 2008)