

Liver Diseases and Skin Lesions

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Prediction of the presence of internal medical diseases from skin manifestations is an important role of dermatologists. In liver diseases, the following various skin manifestations mainly result from abnormal metabolism depending on the degree of impairment: ① Jaundice: Jaundice is noted when the blood bilirubin level elevates to 2 mg/dl or higher. ② Pruritus: Diffuse pruritus develops when biliary congestion occurs. Many patients with primary biliary cirrhosis report persisting pruritus early before the appearance of jaundice. ③ Vascular lesions: Teleangiectasia, palmer erythema, and vascular spider are considered to be due to functional abnormality of peripheral blood vessels caused by impaired estrogen inactivation in the liver (Fig. 1, 2, 3). ④ Secondary xanthoma: Persistent hypercholesterolemia accompanying biliary congestion induces secondary xanthoma in the eyelid, extensor side of the extremities, olecranon, back of the hand, and patella. ⑤ Purpura: Hemorrhage tends to occur due to thrombocytopenia and decreased coagulation factor synthesis, and punctate purpura is noted mainly in the lower leg. ⑥ Pigmentation: Generally, diffuse brown pigmentation occurs in exposed regions, such as the face and back of the hand, in hepatic cirrhosis patients.

The following specific skin manifestations develop with viral hepatitis: ① Primary hepatitis B virus infection-induced Gianotti's disease: The main signs are red papules without pruritus on the cheek and extremities, swelling of superficial lymph nodes, and enlargement of the liver. ② Hepatitis C-associated symptoms: a) Lichen planus: Erosion/white streak in the oral mucosa and red-purple patches with pruritus on the extremities (Fig. 4, 5, 6), b) Porphyria cutanea tarda: photosensitivity, bulla/erosion/scar/pigmentation in light-exposed regions, and

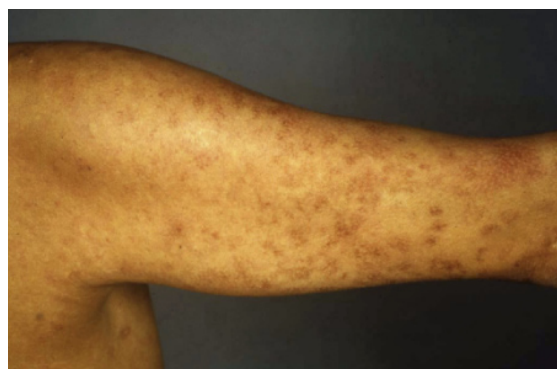


Fig. 1 Paper money skin



Fig. 2 Red palm

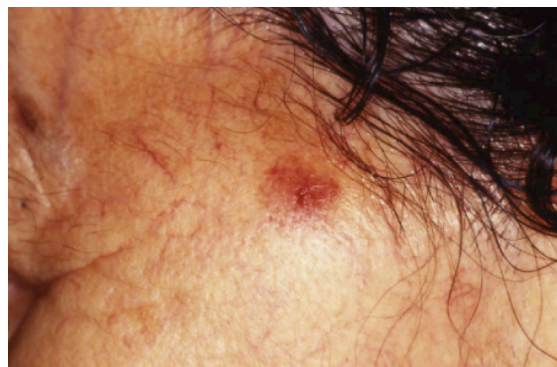


Fig. 3 Vascular spider in hepatocellular carcinoma

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Fig. 4 Lichen planus



Fig. 5 Lichen planus

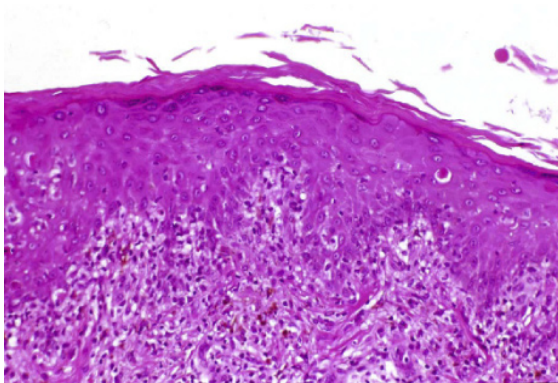


Fig. 6 Lichen planus

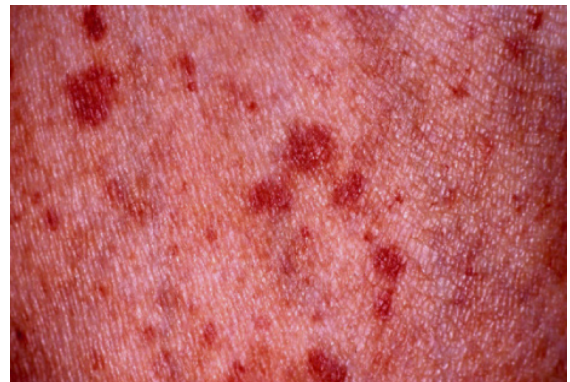


Fig. 7 Cryoglobulinemia

hypertrichosis, c) Vitiligo vulgaris: white patches with clear boundaries. ③ Cryoglobulinemia associated with hepatitis B and C: Vasculitis is induced, and purpura and ulcer are formed in the skin (Fig. 7).

Some patients with liver disorders visit dermatologists for chief complaints of skin lesions. When these skin lesions are noted, liver function tests should be performed and cooperation with internists is necessary.