A Case of Acral Persistent Papular Mucinosis

Hwa Jung Ryu, M.D., Sang Wook Son, M.D., Aeree Kim, M.D.*, Il Hwan Kim, M.D.

Department of Dermatology, Department of Pathology* College of Medicine, Korea University, Ansan, Korea

Acral persistent papular mucinosis has been thought to be a distinct form of cutaneous mucinosis not associated with systemic diseases. It was recently classified as one of five subtypes of localized lichen mixedematosus. A 64-year-old man presented with a 15-year history of flesh-colored to translucent papules and a few round hypopigmented patches on his wrists, back of the hands, and distal forearms. Biopsy from the papular lesions revealed focal mucin accumulation in the upper reticular dermis. The clinical and histopathological features were consistent with acral persistent papular mucinosis. (Ann Dermatol 15(1) 8~11, 2003).

Key Words : Acral persistent papular mucinosis

CASE REPORT

A 64-year-old man presented with a 15-year history of asymptomatic cutaneous lesions symmetrically located on his wrists, back of the hands, and distal forearms. Physical examination revealed flesh-colored or translucent papules and a few well-demarcated, round hypopigmented patches among them. Individual papules were dome-shaped, firm, and smooth on the surface. They persisted since they developed 15 years ago. He had subtotal gastrectomy due to severe gastric ulcer 15 years ago. Otherwise, his past history and family history were nonspecific. His complete blood count revealed mild anemia with hemoglobin 11.9g/dl, but his ferritin, TIBC, PB smear were all in normal range. Urinalysis, liver function test, thyroid function test were shown to be normal or within normal limit. The biopsy was done at the papule and the hypopigmented patch, respectively. Hematoxylin-and-eosin-stained sections of a papule(Fig. 2) demonstrated the presence of a pathologic zone in the upper part of the reticular dermis. The collagen fiber bundles were separated by empty-looking to slightly basophilic areas. Those empty-looking spaces and slightly basophilic areas were stained positively with alcian-blue at pH 2.5(Fig. 3a) and negatively with alcian-blue at pH 1.0. They showed metachromasia with toluidine blue at pH 2.5(Fig. 3a) and negatively with alcian-blue at pH 1.0. They showed metachromasia with toluidine blue at pH 7.0(Fig. 3b) and pH 4.0 but no metachromasia at pH 1.0, suggesting the presence of hyaluronic acid. The sections of the biopsy from the round hypopigmented patch did not show any evidence of mucin deposit in the dermis. It was confirmed to be an idiopathic guttate hypomelanosis with markedly reduced melanin pigment. No further treatment has been done to him.
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DISCUSSION

Cutaneous mucinoses are a heterogeneous group of dermatologic alterations, characterized by cutaneous deposits of acid mucopolysaccharides in a focal or diffuse form. Lichen myxedematosus is an idiopathic cutaneous mucinosis without associated thyroid disease. In 1953, Montgomery and Underwood established a clinical classification of papular mucinosis, with four subtypes: (1) generalized lichenoid papular eruptions; (2) discrete papular form; (3) localized or generalized lichenoid plaque form; and (4) urticarial plaques and nodular eruptions. The nosology of APPM has been controversial. APPM was once thought to be a form of discrete papular form of lichen myxedematosus (DPLM). Rongioletti et al. insisted that APPM is a new entity and they rejected the diagnosis of lichen myxedematosus. In contrast to APPM, DPLM occurs with equal frequency in men and women and the papules are located asymmetrically, sometimes coalesce in plaques, and are variably distributed over the face, trunk, axillary folds, and especially on the knees and elbows. In addition, histologically, the deposit of mucin is diffuse in the mid and deep dermis compared to focal accumulation of mucin in APPM. In APPM mucin spares a subepidermal grenz zone and does not spread through the adjacent