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LETTER TO THE EDITOR

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A case of giant porokeratosis coexisting disseminated superficial porokeratosis

Dear Editor,

Porokeratosis is a hereditary or acquired skin disease characterized histopathologically by cornoid lamellae, a disorder of keratinization of the epidermal cells. There are multiple different clinical variants of porokeratosis, including classical porokeratosis of Mibelli, disseminated superficial actinic porokeratosis, linear porokeratosis, and porokeratosis palmaris plantaris et disseminatum. Giant porokeratosis is considered as a morphological variant of porokeratosis of Mibelli.[1] Although different types of porokeratosis have been previously reported to coexist in a single individual, the combination of giant porokeratosis and disseminated superficial porokeratosis is rare.[2,3] We herein report a case of the coexistence of variant forms of porokeratosis and discuss our findings while comparing the histological features of both lesions.

A 66-year-old man had a history of radiation therapy for prostate cancer at 62 years old. From 15 years before his first visit to our hospital, he noticed brown papules on his buttocks, which later spread to his abdomen and extremities. At the first visit, he had itching, and large hyperkeratotic reddish-brown plaques were scattered around the buttocks, with small reddish-brown macules and papules clustered on the limbs (Figure 1A-F). After exclusion of fungal infection, biopsy specimens were obtained from the small annular lesion on the upper arm (Figure 1G) and the large lesion on the buttock (Figure 1H). Histological findings revealed an invagination of the epidermis with a cornoid lamella overlying an absent granular layer and dermal perivascular lymphocytic infiltrate at each keratotic ridge both of the small annular lesion and large lesion. The annular lesion on the upper arm revealed central atrophic epidermis with a single cornoid lamella (Figure 1I, K). On the other hand, the large lesion on the buttock revealed multiple broad cornoid lamellae (Figure 1J), number of dyskeratotic cells and atypical basal cells under the cornoid lamellae, and pigment dropout followed by melanophage infiltration in the upper dermis (Figure 1L). Taken these findings, the present skin disease was diagnosed with the coincidence of giant and disseminated superficial porokeratosis. Slight flattening was noted along with resolution of the hyperkeratotic plaques on the buttocks after therapy with oral etretinate at 10 mg/d, oral antiallergic agents, topical steroids, and vitamin D3.

Although the two types of linear and disseminated superficial actinic porokeratosis are the most frequently reported to arise simultaneously,[4] the case of giant porokeratosis coexisting with disseminated superficial porokeratosis is rare.[2,3] Comparing the histological features between 2 types of lesions, cornoid lamellae, dyskeratotic cells, eosinophilic cytoplasm as premature keratinization, basal cells atypia, and underlying infiltration were observed the more evident on the giant lesions than on the small annular lesion. A giant porokeratosis is known to potentiate high incidence of malignant transformation.[5] In the present case, the buttock lesion diagnosed as giant porokeratosis histologically carried increased premature keratinization and basal cell atypia in the epidermis which corresponds to a precursor of skin malignancy. Therefore, careful observation and histological

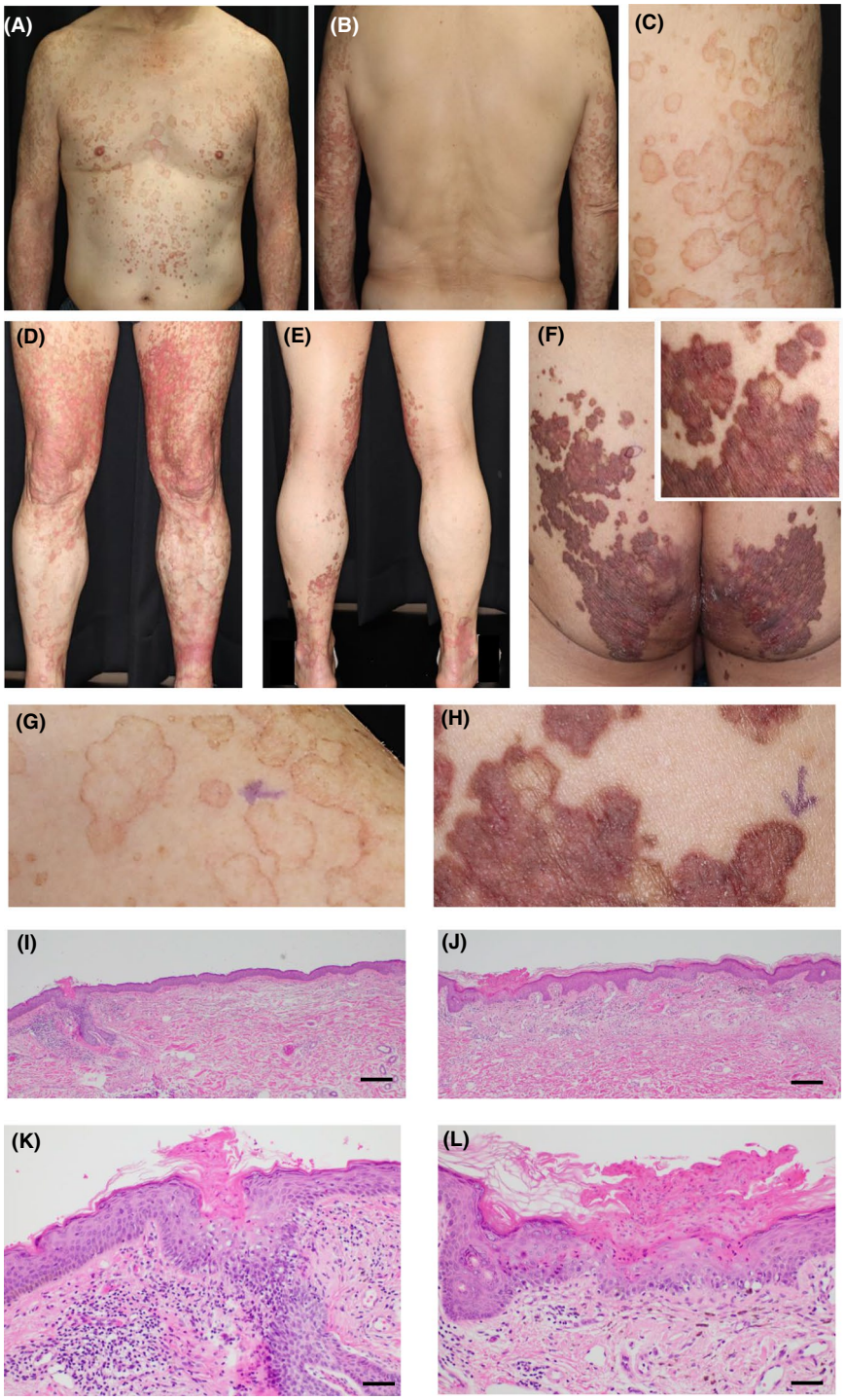

FIGURE 1 Clinical appearance and histological findings of the patient. A-F, The patient presented with large hyperkeratotic reddish-brown plaques around the buttocks and small, annular brown patches on the limbs and trunk, excluding the back. G, I, A skin biopsy of the annular lesion on the upper arm revealed central atrophic epidermis with a single cornoid lamella. The bar indicates 100 μm. K, Lymphocytes and histiocytes had infiltrated around the small vessels of the upper dermis. The bar indicates 50 μm. H, J, A biopsy of the large lesion on the buttock revealed features of multiple broad cornoid lamellae. The bar indicates 100 μm. L, Some cells on the large lesion possess an eosinophilic cytoplasm and dyskeratotic cells under the cornoid lamellae, along with pigment dropout and melanophage infiltration in the upper dermis. The bar indicates 50 μm

examination at rapid growing are required especially on the buttock lesions.

DECLARATION

Approval of the research protocol: N/A.
Informed Consent: The written informed consent was obtained from the patient. Dr Fujimoto is a member of the Journal of Cutaneous Immunology and Allergy Editorial Board. Management of the peer review process, and all editorial decision-making, for this article was undertaken by an Associate Editor.
Registry and the Registration No. of the study/trial: N/A.
Animal Studies: N/A.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

Saori Itoi-Ochi[1,2]
Atsushi Tanemura[1]
Noriko Arase[1]
Manabu Fujimoto[1]

[1]*Department of Dermatology, Osaka University Graduate School of Medicine, Suita, Japan*
[2]*Department of Dermatology, Suita Municipal Hospital, Suita, Japan*

Correspondence
Saori Itoi-Ochi, Department of Dermatology Integrated Medicine, Osaka University Graduate School of Medicine, 2-2 Yamadaoka, Suita, Osaka 565-0871, Japan.
Email: 102itoi@derma.med.osaka-u.ac.jp

ORCID

Saori Itoi-Ochi https://orcid.org/0000-0002-8646-2059
Atsushi Tanemura https://orcid.org/0000-0002-5239-8474
Noriko Arase https://orcid.org/0000-0003-3966-3437
Manabu Fujimoto https://orcid.org/0000-0002-3062-4872

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