

LETTER TO THE EDITOR

Chronic Cutaneous Graft versus Host Disease Mimicking Warts

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Dear Editor:

Chronic graft-versus-host disease (cGVHD) occurs in 60%~80% of allogeneic transplant recipients at some point in their post-transplant period. The skin is the most frequently involved organ at initial diagnosis (~75%)¹. Frequently reported cutaneous manifestations of cGVHD include lichen planus-like, lichen sclerosus-like, morphea-like, poikiloderma, ichthyosis-like, keratosis pilaris-like, dyspigmentation, and sweat impairment². Here, we report four cases of a rare manifestation of cutaneous cGVHD: cGVHD lesions resembling palmoplantar warts.

Between 2009 and 2011, four cases of wart-like palmoplantar hyperkeratotic papules were diagnosed as lichenoid cGVHD in our clinic (Table 1). In patient 1, the lesions were mainly distributed along the palmar creases and finger and toe webs (Fig. 1A), and in patient 2 on the finger-tips (Fig. 1B). Patient 3 had palmar erythematous papules and patches (Fig. 1C), and patient 4 had punctuated hyperkeratotic papules on the palms and soles (Fig. 1D). The disease duration was between 14 and 120 days, and the time interval between peripheral blood stem cell transplantation and the lesion onset was between 164 and

Table 1. Clinical characteristics of the patients with wart-like cutaneous chronic GVHD

Patient	Age (y)/sex	Cutaneous findings	Hematologic disease	Type of HSCT	Duration of the lesion (d)	Time interval between HSCT and the lesion onset (d)	Medication history
1	39/male	Skin-colored papules on the palmar creases and finger and toe webs	MDS	alloPBSCT	120	1,142	Tacrolimus, mycophenolic acid
2	30/female	Yellowish papules on the finger tips	SAA	uPBSCT	90	243	Cyclosporine, mycophenolic acid
3	13/male	Erythematous papules on the both palms	ALL	alloPBSCT	14	164	Cyclosporine, allopurinol, fluconazole
4	41/male	Punctuated hyperkeratotic papules on palms and soles	AML	uPBSCT	14	318	Ganciclovir, mycophenolic acid

GVHD: graft-versus-host disease, HSCT: hematopoietic stem cell transplantation, MDS: myelodysplastic syndrome, alloPBSCT: allogeneic peripheral stem cell transplantation, SAA: severe aplastic anemia, uPBSCT: unmatched peripheral blood stem cell transplantation, ALL: acute lymphoblastic leukemia, AML: acute myelocytic leukemia.

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Fig. 1. (A) Skin-colored, flat-topped papules along the palmar creases in case 1. (B) Yellowish, hyperkeratotic papule on the finger tips in case 2. (C) Erythematous papules and patches on both palms in case 3. (D) Punctated hyperkeratotic papules on the soles in case 4.

1,142 days. All of the skin biopsy specimens taken from the four patients showed hyperkeratosis, acanthosis, exocytosis, and apoptotic basal cells in the epidermis, with band-like lymphocytic infiltrations in the upper dermis. The pathology was consistent with chronic lichenoid GVHD.

The hyperkeratotic papules on the hands and feet of our patients were initially diagnosed as warts. Because these patients were immunocompromised due to hematologic diseases and immunosuppressants, the appearance of multiple warts that had spread widely in a short time did not seem unusual. However, the pathologic findings of the lesions in all four cases were consistent with chronic lichenoid GVHD. Findings suggestive of papillomavirus infection, such as papillomatosis and koilocytotic atypia, were absent. In addition, tissue human papilloma virus DNA polymerase chain reaction tests were negative in all patients.

GVHD involving the acral area usually manifests as palmo-plantar erythema, particularly in its acute stage³. Also, lichenoid GVHD lesions are characterized by erythema-

tous or violaceous papules and plaques with fine scales that usually coalesce on the dorsal aspects of the hands, forearms, and trunk⁴. However, palmo-plantar hyperkeratotic papules have rarely been described. In a case of acral keratotic GVHD reported by Kossard and Ma³, the patient took hydroxychloroquine for 9 months before the lesion onset; the acral keratosis might have been induced by this medication. There is one report of quinacrine hydrochloride-induced keratoderma with underlying lichenoid reactions on the palms and soles⁵. However, none of our patients had a history of taking such drugs.

Wart-like cutaneous cGVHD can be misdiagnosed as palmo-plantar warts because of their morphologic similarity; however, warts usually develop as a single lesion and spread slowly for months, whereas the wart-like cGVHD lesions spread within 4 months. In addition, the wart-like cGVHD showed symmetric distribution and a tendency to be distributed along palmar creases, whereas warts develop focally.

In conclusion, we suggest that acral wart-like hyperkeratotic papules should be included in the list of rare cuta-

neous manifestations of cGVHD.

REFERENCES

1. Lee SJ, Flowers ME. Recognizing and managing chronic graft-versus-host disease. *Hematology Am Soc Hematol Educ Program* 2008;134-141.
2. Filipovich AH, Weisdorf D, Pavletic S, Socie G, Wingard JR, Lee SJ, et al. National Institutes of Health consensus development project on criteria for clinical trials in chronic graft-versus-host disease: I. Diagnosis and staging working group report. *Biol Blood Marrow Transplant* 2005;11:945-956.
3. Kossard S, Ma DD. Acral keratotic graft versus host disease simulating warts. *Australas J Dermatol* 1999;40:161-163.
4. Peñas PF, Zaman S. Many faces of graft-versus-host disease. *Australas J Dermatol* 2010;51:1-10.
5. Bauer F. Quinacrine hydrochloride drug eruption (tropical lichenoid dermatitis). Its early and late sequelae and its malignant potential: a review. *J Am Acad Dermatol* 1981;4: 239-248.

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Adult Onset Dyschromatosis Universalis

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Dear Editor:

Dyschromatosis universalis hereditaria (DUH) is a rare hereditary skin disorder that is characterized by a mixture of small and irregularly sized hyperpigmented and hypopigmented macules of a mottled or reticulated pattern. The usual onset age of DUH is 6 years¹. The common pattern of inheritance is generally autosomal dominant; however, rarely, a few cases show a sporadic pattern. Some authors named this form as dyschromatosis universalis (DU) instead of DUH². We report a case of DU in a 29-year-old female patient with no family history and a late onset of the disease.

A 29-year-old Korean woman presented with asympto-

matic multiple pinhead to rice sized mottled hypopigmented macules with diffuse hyperpigmented patches on the abdomen and left upper arm (Fig. 1A). The hyperpigmented lesions, which had been noted 1 year previously, started initially on the abdomen and gradually spread to the left upper arm. She has no history of systemic disease or any previous cutaneous disease. She also denied any family history of skin discoloration or similar skin lesions.

A biopsy specimen taken from the hyperpigmented lesion on the abdomen showed increased abundant melanin pigments in the epidermis, with normal number and distribution of melanocytes on hematoxylin-eosin, Fontana Masson, and MART-1 staining (Fig. 1B). In contrast, the histopathologic finding of a hypopigmented macule suggested a reduced amount of melanin pigments in the lesion area (Fig. 1C). On the basis of these findings, the diagnosis was concluded to be DU. We recommended treatment with Q-switched Nd:YAG laser for the hyperpigmented lesions; however, she refused the therapy. She has been followed without any changes.

Rycroft et al.³ reported a case with no family history, but was associated with short stature and high tone deafness. In addition, Shono and Toda⁴ reported a case with no

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