Case Report

Telangiectasia macularis multiplex acquisita

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Telangiectasia macularis multiplex acquisita (TMMA) is a rarely documented disease entity that usually occurs in the middle-aged men. A 68-year-old man presented with asymptomatic erythematous-brownish macules with telangiectasia on the upper arms, anterior chest, shoulders, and upper back. He had hypertension, diabetes, and hepatitis B infection for several years. Laboratory findings revealed elevation of liver enzymes, but autoimmune markers and sex hormone levels were normal. Biopsy specimen revealed perivascular lymphocytic infiltration. He was diagnosed as TMMA with hepatitis B infection.

Keywords: Telangiectasia macularis multiplex acquisita

Introduction

Telangiectasia macularis multiplex acquisita (TMMA) is a rarely documented disease entity with distinctive clinical manifestations. The clinical criteria for diagnosis of TMMA include: (1) crops of telangiectasia superimposed on erythematous macules symmetrically on bilateral upper arms that may extend to the forearms, shoulders, V-area of the anterior chest, back or thighs;
(2) no mucosal or systemic involvement; (3) not associated with autoimmune diseases, such as lupus erythematosus, dermatomyositis or systemic scleroderma that may induce cutaneous telangiectasia; and (4) no ataxia or unsteady gait.

Here, we report a case of TMMA occurring in a patient with chronic hepatitis B infection.

**Case report**

A 68-year-old man presented with a 5-year history of multiple erythematous-brownish macules with telangiectasia on the upper arms, anterior chest, shoulders, and upper back (Figure 1). He denied any history of excessive sun exposure. He had hypertension and diabetes mellitus for 10 years. The patient also had hepatitis B viral infection for 15 years, but had not received any treatment for this condition. On physical examination, palmar erythema was observed. Histopathological examination from the upper chest revealed solar elastosis and mild perivascular lymphocytic infiltration in the upper dermis (Figures 2a & 2b). Toluidine blue staining to identify mast cell infiltration did not demonstrate any specific findings (Figure 2c). Laboratory tests for autoimmune disease and sex hormone levels were within the normal range, but aspartate transaminase (95 IU/L, normal: 5-35 IU/L) and alanine transaminase (81 IU/L, normal: 5-40 IU/L) levels were elevated. Additionally, the patient was positive for HBsAg and HBeAg. These findings were not consistent with other conventional disease entities. As the patient fulfilled the clinical criteria of TMMA, he was diagnosed as TMMA accompanied by hepatitis B infection. We tried to monitor him regularly without specific treatment, but he subsequently defaulted further follow-up.

**Discussion**

TMMA is rarely addressed in the English literature. It is mostly reported in Asians, primarily in Chinese, which may be due to the ethnic predilection to Asian populations. The age of onset is variable, but mostly occurs in middle-aged men between the third to sixth decades. TMMA typically presents with multiple telangiectasia superimposed on erythematous macules in a V-shape on the anterior chest, both arms, shoulders, and back. The differential diagnosis of TMMA includes poikiloderma, telangiectasia macularis eruptive

![Figure 1](image_url) Clinical appearance at presentation. Multiple telangiectases superimposed on erythematous macules on the anterior chest, bilateral arms, shoulder, and back. (a) Front; (b) Back.
A case of Telangiectasia macularis multiplex acquisita

perstans (TMEP), acquired brachial cutaneous dyschromatosis, and acquired bilateral telangiectatic macules. Poikiloderma is a descriptive term referring to a combination of cutaneous atrophy, telangiectasia, and macular pigmentary changes that result in a mottled skin appearance. Solar radiation has been proposed as the main cause. However, TMMA presents with widespread skin lesions on both sun-exposed and non-exposed areas. Also, TMMA does not involve the face. Telangiectasia macularis eruptiva perstans is a variant of cutaneous mastocytosis, which shows mast cell infiltration in the papillary dermis. However, TMMA lesions show no significant difference the mast cell count. Acquired brachial cutaneous dyschromatosis is a pigmentary disorder that shows gray-brown patches with geographic borders, occasionally interspersed with hypopigmented macule. It mostly involves the dorsal aspect of forearms and usually affects the post-menopausal women. Acquired bilateral telangiectatic macules is a newly described disorder in Korea. Unlike TMMA, skin lesions of this entity are primarily confined to the upper arms. Additionally, in contrast to these differential diagnoses, TMMA is thought to be associated with systemic diseases, including hepatitis, diabetes, or cardiovascular diseases.

Chang et al studied 25 Chinese patients with TMMA to determine disease associations. They found that patients with TMMA had a much higher prevalence rate of dyslipidaemia (64.7%), viral hepatitis (56.5%), hypertension (50%), and diabetes (38.9%) than the general population. Similarly, Wang et al reported two cases of TMMA with concomitant hepatitis B infection and inferred that TMMA might belong to the spectrum of vascular changes in liver disease. Chronic liver disease presents with various cutaneous manifestations such as palmar erythema, spider angioma, and arteriovenous hemangioma. Several mechanisms have been proposed to explain these vascular changes in liver disease, including dysfunction of arteriovenous anastomoses, portal hypertension, elevated plasma vascular endothelial growth factor, and an altered serum estrogen level. Based on these literature, we speculated that TMMA might be another cutaneous manifestation of liver dysfunction. The treatment of TMMA is still unknown. For cosmetic reason, dye laser or intense pulsed light can be chosen as treatment of TMMA in view of its effect on telangiectasia.

Herein, we report a case of telangiectasia macularis multiplex acquisita accompanied with

Figure 2. Histopathological findings. (a) Perivascular inflammatory cell infiltrate in the upper dermis (haematoxylin-eosin x40). (b) Lymphocytic infiltration in the upper dermis without significant telangiectasia (haematoxylin-eosin x100). (c) No mast cell infiltration in the lesion (toluidine blue stain x40).
hepatitis B infection. To our knowledge, this is the first case report in a Korean patient. In fact, this disorder is not rare. We thought that TMMA should be preferentially considered in patients with hepatic dysfunction or metabolic disease who present with telangiectasia superimposed on erythematosus macules.

References