Angioma Serpiginosum

A Report of 2 Cases Identified Using Epiluminescence Microscopy

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Background: Angioma serpiginosum is a rare, acquired vascular lesion simulating purpura, and should be differentiated from purpuric dermatoses such as Henoch-Schönlein purpura.

Observations: We report 2 cases of angioma serpiginosum examined using epiluminescence microscopy. Characteristic findings of angiomas (“red lagoons”) were observed entirely or focally in these 2 cases, but not in 4 cases of Henoch-Schönlein purpura and a case of senile purpura.

Conclusion: Epiluminescence microscopy is beneficial in distinguishing angioma serpiginosum from purpuric dermatoses.

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A NGIOMA serpiginosum is a rare acquired vascular disorder that manifests clinically as numerous punctate erythemas that simulate purpura. Therefore, it is sometimes difficult to distinguish from purpuric dermatoses such as Henoch-Schönlein purpura. We report 2 cases of angioma serpiginosum diagnosed using epiluminescence microscopy.

REPORT OF CASES

CASE 1

A 21-year-old woman came to our department in October 1998 with an asymptomatic eruption on her knee that had been noticed about 5 years previously. The lesion had not grown or multiplied since that time. The patient’s medical and family histories were unremarkable. The findings of physical examination included numerous punctate, dark red erythemas around her right knee that did not disappear under the pressure of diascopy (Figure 1).

CASE 2

In August 1998, a 15-year-old boy presented with punctate eruptions on his right lower extremity. His parents had first noticed the eruptions about 4 months after his birth, although there were no eruptions present at birth. They gradually multiplied with no symptomatic sign until about age 7 years. The patient’s medical and family histories were unremarkable. Findings of physical examination included numerous punctate erythemas on the lateral portion of the leg from the right knee to the lower leg, some of which were grouped (Figure 2). The eruptions did not disappear under diascopy.

HISTOPATHOLOGIC FINDINGS

The results of histopathologic examinations in both cases revealed dilated, thin-walled capillaries in the dermal papillae and superficial reticular dermis. There was no extravasation of red blood cells and no perivascular inflammatory infiltration (Figure 3).

RESULTS

In case 1 the condition manifested entirely as numerous small, red, sharply demarcated lagoons (Figure 4). In case 2, the results of epiluminescence microscopy showed relatively well-demarcated round to oval red patches, including the typical red lagoon (Figure 5). In the 4 cases of Henoch-Schönlein purpura and a case of senile purpura, however, the eruptions consisted of irregularly shaped red patches with blurred borders; no lagoon was observed.
METHODS

The eruptions were evaluated in vivo with application of Echo Gel (Nikko Fine Industries Co Ltd, Tokyo, Japan) using a Dermatoscope Delta 10 (Heine Optotechnik, Herrsching, Germany), and were photographed using Dermaphoto (Heine Optotechnik, Herrsching, Germany). For comparison, 4 cases of Henoch-Schönlein purpura (histologically confirmed as leukocytoclastic vasculitis) were analyzed by the same procedure. A case of senile purpura was also examined.
Angioma serpiginosum is characterized by erythematous punctate lesions that do not disappear under diascopy. Because the lesion simulates purpura, differentiation from purpuric dermatoses such as Henoch-Schönlein purpura is important, and it is sometimes difficult to distinguish them by clinical appearance alone. Therefore, the patient with angioma serpiginosum tends to undergo unnecessary hematological tests for the investigation of purpura.

Epiluminescence microscopy is a nonstressful procedure for evaluating colored lesions of the skin surface. There have been many investigations concerning melanocytic lesions, especially malignant melanoma. However, the procedure is also useful for evaluating vascular lesions. Typical findings, ie, demarcated red lagoons due to dilated vascular spaces within the papillary or superficial reticular dermis, occur in hemangiomas, predominantly in eruptive hemangiomas and angiokeratomas. To the best of our knowledge, there is no report of epiluminescence microscopy being used to evaluate angioma serpiginosum. The eruptions in case 1 consisted entirely of red lagoons, and those in case 2 included red lagoons as well as other hemangiomas; there were no lagoons in the 5 cases of purpuric lesions. Therefore, epiluminescence microscopy is beneficial in distinguishing angioma serpiginosum from purpuric dermatoses.

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REFERENCES