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light-chains (Fig. 1F, no kappa light-chains were found: see Fig. 1E); hence, systemic immunoglobulin light-chain amyloidosis was suspected. In electron microscopy, amyloid fibrils were seen (Fig. 1G, H). She received bortez-omib/dexamethasone, and it was planned to induce remission for autologous stem cell therapy with lenali-domide/dexamethasone. She died from amyloid-induced heart failure prior to the planned treatment.

Typically, amyloid purpura occurs above the nipple-line, mostly on the head and neck, and particularly on the eyelids<sup>1,2</sup>. Among the suspected reasons for dermatorrhagia are that factor X is decreased by binding to amyloid fibrils, and that amyloid deposits in blood vessel walls increase vessel fragility.

As purpura may be among the first signs of systemic amyloidoses, it is of utmost importance for dermatologists to keep this sign in mind. A suspected diagnosis of amyloidosis may be the starting point for an interdiscipilinary treatment regimen as different organs may be involved<sup>3</sup>. Furthermore, it is crucial to treat the underlying cause (e.g., multiple myeloma, plasmocytoma, renal insufficiency with hemodialysis). However, there are also a couple of hereditary systemic amyloidoses with cutaneous involvement, e.g., Meretoja's syndrome (i.e. gelsolin amyloidosis)<sup>2</sup>. Future treatments with siRNAs or antiamyloid antibodies are in the pipeline<sup>4,5</sup>, and we will see which ones make their way from bench to bedside.

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http://dx.doi.org/10.5021/ad.2013.25.3.392

# Cutaneous Septic Embolism Presenting as Erythematous Plaques

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Dear Editor:

Intravascular devices such as prosthetic vascular grafts are therapeutic tools of fundamental importance for patients with several vascular diseases. Due to the expanding usages of these devices, incidences of infectious complications are also increasing. The skin can be one of the first sites where signs of sepsis can appear. It is important to be aware of the different clinical features of septic emboli in

Received June 12, 2012, Revised November 8, 2012, Accepted for publication November 22, 2012

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order to detect them early.

An 'erythematous plaque' eruption due to septic embolism from an infected prosthetic aortic graft is being reported.

A 62-year-old man was being admitted to the emergency room with a 5-day history of fever and an erythematous plaque on his right thigh. The patient was an ex-smoker and had a history of arterial hypertension, chronic renal failure and ischemic heart disease. Five years ago, he required an amputation below his right knee and implantation of prosthetic vascular grafts due to severe peripheral vascular diseases.

Physical examinations revealed painless, warm, erythematous and edematous plaques with poorly defined



Fig. 1. Erythematous and edematous plaques with poorly defined borders affecting the right leg of the patient.

borders on the right thigh (Fig. 1).

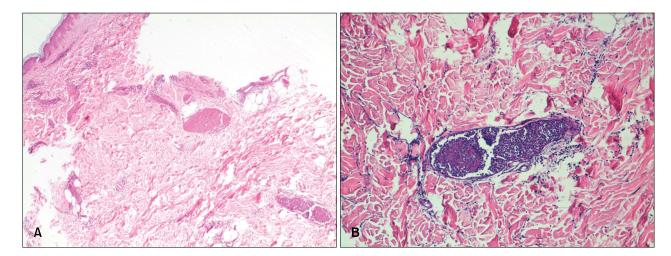
Blood tests showed increased plasma creatinine (3.2 mg/dl; reference:  $0.3 \sim 1.3$  mg/dl) and C-reactive protein (26.76 mg/dl; reference: <1 mg/dl) with 89% neutrophilia. Chest X-rays and urine sediments were normal. A skin biopsy was performed showing intraluminal neutrophil thrombi in the deep dermis vessels, suggesting cutaneous septic embolism (Fig. 2).

Blood and skin cultures were negative. Transthoracic echocardiography showed no signs of infective endocarditis. computed tomography angiography, positron emission tomography scan and leukocyte scintigraphy showed collections in the inguinal and abdominal perivascular prosthetic grafts. Piperacillin/tazobactam plus vancomycin were prescribed with good initial responses. He also underwent surgical replacement of the vascular prosthesis, but died of dehiscence due to the new prosthesis two days after the surgery. The culture of the infected vascular graft was positive for *Streptococcus viridans*.

Bacterial endocarditis, infected pseudoaneurysm after endovascular procedures and infected endovascular devices are the most frequent sources of infected emboli, which can lodge to distal vascular trees causing skin lesions.

Clinical findings of cutaneous septic embolism are variable: palpable purpura, petechiae, hemorrhagic plaques, pustules, nodules, digital cyanosis and livedo reticularis have been described. Osler nodes and Janeway lesions are special forms of septic emboli presentations, commonly associated with bacterial endocarditis<sup>1</sup>. On the other hand, erythematous plaques have been poorly described in the literature<sup>2</sup>.

Cutaneous septic embolism biopsy determines the presence of thrombus of neutrophil in dermal blood vessels,



**Fig. 2.** (A) Skin biopsy showing deep dermis vessels with luminal occlusion due to the presence of neutrophils and fibrinoid material (H&E,  $\times 20$ ). (B) Detail at high magnification showing an intraluminal neutrophil thrombus in the deep dermis vessels (H&E,  $\times 100$ ).

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although bacteria are usually not detected<sup>3</sup>.

Once the diagnosis of infected emboli in patients carrying vascular devices is made, empiric broad-spectrum antibiotic therapy should start immediately<sup>4</sup>. Imaging studies should be performed to locate the infected focus for optimal surgery.

Our patient presented erythematous plaques due to infectious emboli with no evident of clinical signs of sepsis. Histopathology aids us to establish a diagnosis. Unfortunately, the patient died after the surgery.

Erythematous plaques eruption should be taken into account as a clinical form of cutaneous septic emboli.

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http://dx.doi.org/10.5021/ad.2013.25.3.394

# The Relation of Onychomatricoma to Onychodermis in the Nail Unit

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#### Dear Editor:

Onychomatricoma is a very rare tumor of the nail unit. It is originally reported to be a benign tumor of the nail matrix as the name implies<sup>1</sup>. However, histopathologically, it is a fibroepithelial tumor with well-established features. Recently, based on its histopathological and immunohistochemical features, the concept of epithelial onychogenic tumor with onychogenic mesenchyme is being suggested for this peculiar mixed tumor<sup>2</sup>. Nevertheless, the authors mention that the term onychomatricoma is short and sanctioned by usage, and justifies such statement. We recently demonstrated the presence of specialized mesenchyme containing onychofibroblasts beneath the nail matrix and nail bed<sup>3,4</sup>. Based on this finding, we proposed new terminology onychodermis for specialized mesenchyme because it is histologically and immuno-histochemically distinct from the dermis of other parts of the nail unit.

This study evaluates the relation of onychomatricoma to onychodermis in the nail unit we performed CD10 immunohistochemistry in one case of onychomatricoma sample (a kind gift from Dr Robert Baran and Dr Josette André). Immunohistochemical staining was performed using the

Received October 9, 2012, Accepted for publication November 22, 2012

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