

medical advice (acne video #3 and psoriasis video #3) as determined by the two reviewing senior medical student authors (A. H. and R. G. G.). *Wounds UK* was the only journal found.

The results suggest a larger presence of reliable dermatologic information on these sites than previously thought.⁴ Dermatology content predominantly belonged to healthcare professionals or organizations. Conversely, dermatology journals displayed minimal presence. The study methods of this initial shot across the bow of social media and dermatology may be improved by further study utilizing more uniform social media searches and by the development of a validated measure to assess the quality of the retrieved dermatology content.

Social media presents new promises and perils not only for individual physicians but also for their academic enterprises.⁵ Academic journal publishing and business models are changing from print to online. With this transition, sustainable business models will increasingly depend upon online advertising. Rates for online advertising depend on website view counts. Social networking provides a means for journals to increase their website traffic and hence subsequently boost online advertising rates. While most dermatology journal information is not intended for the general public, they may develop better general public news and information on skin disease for patient education. The public is searching for credible information on social networks. By abstaining from these unregulated sites on principle, journals forgo both educational and marketing opportunities.

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CASE LETTERS

Serum sickness–like reaction: Histopathology and case report

To the Editor: Serum sickness–like reaction (SSLR) is a well-described clinical entity; however, the histopathology is underreported and possibly misunderstood. In fact, a MEDLINE search (1951 through 2010) revealed only 3 articles describing the histopathology of SSLR among more than 100 case reports (Table I). Dermatopathology textbooks either do not mention the histopathology of SSLR or lump its biopsy findings together with serum sickness reaction. The

purpose of this letter is to clarify the histopathology of SSLR for dermatologists evaluating these patients.

A 2-year-old boy presented to the emergency department 3 days after developing arthralgias and a pruritic eruption that was evolving despite a regimen of prednisone, 2.6 mg/kg per day. The rash appeared 24 hours after the cessation of 4 days of diarrhea without other signs or symptoms. Additionally, the patient had ingested a minimal amount of cotrimoxazole (Bactrim) 1 month earlier.

On examination, the patient was well appearing and afebrile. On the bilateral flanks, hips, medial

Table I. Comparison of the clinical features and the histopathologic features seen in our patient and 3 other case reports of serum sickness–like reaction

	Our patient	Yerushalmi, Zvulunov, and Halevy ²	Swanson and English ³	Parra et al ⁴
Patient demographics	2-year-old male	3-year-old female	19-year-old female	34-year-old male
Etiology	Bactrim vs bacterial or viral antigen	Cefaclor	Pamabrom	Rifampin
Rash description	Blanchable pink arcuate and annular edematous plaques, often surrounding purple annular patches within which were yellow patches	Annular urticarial plaques w/ dusky or clear centers	Erythematous, annular urticarial plaques; localized bullous changes	Generalized morbilliform rash
Symptoms	Fever, arthralgias, and acral and perioral edema	Fever, arthralgias, swelling over ankles	Fever, arthralgias, acral swelling, fatigue	Fever, arthralgias, articular swelling
Biopsy results	Mixed superficial to deep interstitial dermal inflammatory infiltrate w/ numerous neutrophils and eosinophils; no vasculitis	Dermal edema w/ mild perivascular lymphocytic infiltrate; no vasculitis; consistent w/ urticaria	Superficial and focally deep spongiotic urticarial perivascular dermatitis w/ eosinophils; no vasculitis	Edema of perivascular stroma w/ perivascular accumulations of lymphocytes, histiocytes, and neutrophils

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thighs, and proximal upper extremities were blanchable, pink, arcuate and annular edematous plaques (Fig 1, A and B), often surrounding purple annular patches within which were yellow patches. His face and extremities revealed multiple annular and cockade-shaped pink edematous plaques with involvement along Wallace's lines on his feet. Some of these lesions showed slight centrifugal expansion over the 24-hour period of observation. The other lesions were stable over this time period. There was periorbital and acral edema and 1+ dermatographism. The oral mucosa, conjunctiva, scrotum, palms, soles, and buttocks were clear. He complained of pain in his knees and ankles.

Chemistry and liver function tests were within normal limits. During prednisone treatment, the patient's white blood cell count was 23,100/ μ L (63% neutrophils; 22% lymphocytes). His platelet count was 418,000/ μ L. C-reactive protein and erythrocyte sedimentation rate were 77.7 mg/L and 28 mm/h, respectively. Anti-streptolysin O, Lyme, and *Mycoplasma pneumoniae* antibody titers were negative. Urinalysis and stool culture were normal. Blood cultures showed no growth.

SSLR was diagnosed on the basis of skin biopsy findings (see Table I; Fig 1, C and D) together with the clinical presentation. The prednisone was

discontinued, and the next day the patient became febrile to 101.8° F, but quickly defervesced. The eruption resolved over the following week, and the arthralgias and swollen joints resolved over the following 3 weeks. The etiology of the reaction appeared to be either Bactrim (with a significantly delayed response) or a viral or bacterial antigen.

SSLR is considered a drug reaction characterized by rash (urticarial or morbilliform), fever, and arthralgias without evidence of cutaneous or systemic vasculitis.¹ Unlike serum sickness reaction, a type III hypersensitivity reaction with immune complex deposition, the pathophysiology of SSLR is not thought to be immune complex mediated. Although the histopathology in our patient is nonspecific, it is compatible with a urticarial hypersensitivity reaction. Three other case reports²⁻⁴ documenting the histopathology of SSLR describe features consistent with urticaria without evidence of vasculitis (see Table I; Fig 1, C and D).

The diagnosis of SSLR is frequently based on clinical features. However, in those instances when a skin biopsy is necessary, it is important to know the histopathologic features that support a diagnosis of SSLR. Our results add to the small number of previous reports showing histopathology that appears to be in the spectrum of urticaria. This is distinct from the vasculitis seen in acute hemorrhagic edema of

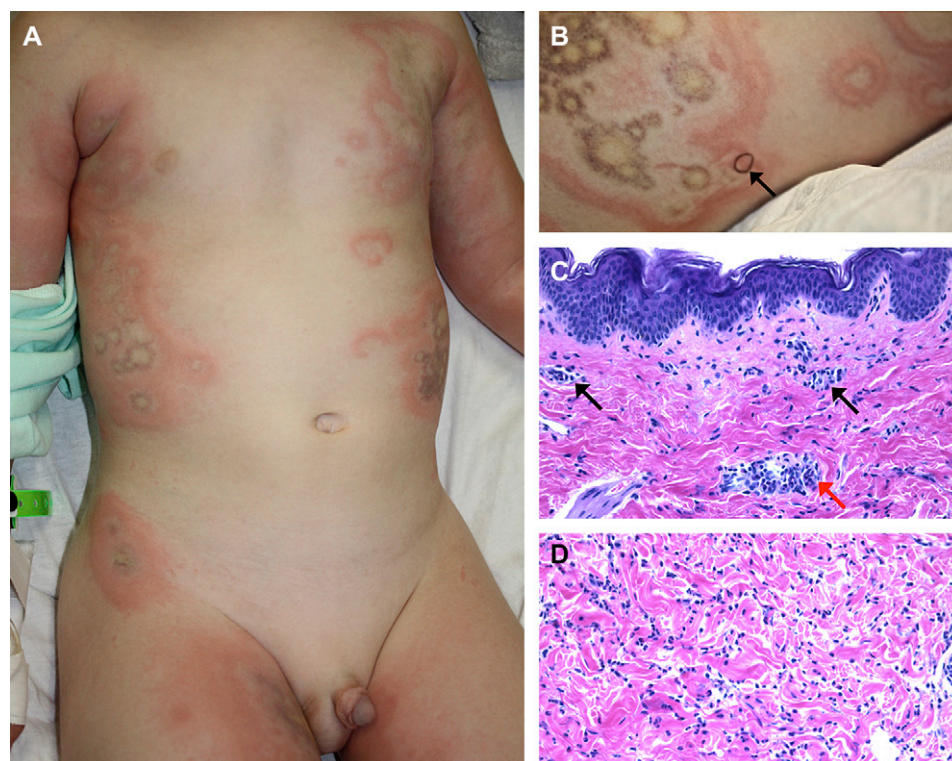


Fig 1. Physical examination 3 days after the development of rash and histopathologic results. **A**, Blanching arcuate and annular pink edematous plaques with central purple annular patches surrounding a yellow center on the bilateral flanks and thighs. **B**, Skin biopsy specimen was obtained from the edge of an edematous pink plaque on the left flank (black arrow). **C**, Two small vascular plexuses in the papillary dermis (black arrows) and one larger vascular plexus in the dermis (red arrow) reveal densely packed neutrophils without neutrophilic debris or fibrinoid necrosis. **D**, Mixed mid-dermal inflammatory infiltrate with neutrophils, lymphocytes, and eosinophils. (**C** and **D**, Hematoxylin-eosin stain; **D**, original magnification: $\times 40$.)

infancy that is in the clinical differential diagnosis of SSLR and is important to rule out because of the possibility of internal organ involvement.⁵

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Lichenoid keratosis-like melanomas

To the Editor: Melanoma with regression may represent a diagnostic and prognostic dilemma. Total regression of a primary melanoma can occur, eventually causing a metastatic disease with an unknown primary lesion.¹ Lichenoid keratosis, or lichen planus-like keratosis (LPLK), has been proposed to represent a regressive epidermal lesion, either a solar lentigo or a seborrheic keratosis. At the end of the regressive process, LPLKs usually show dermatoscopically a diffused granular pattern, characterized by the presence of scattered grayish dots.² When