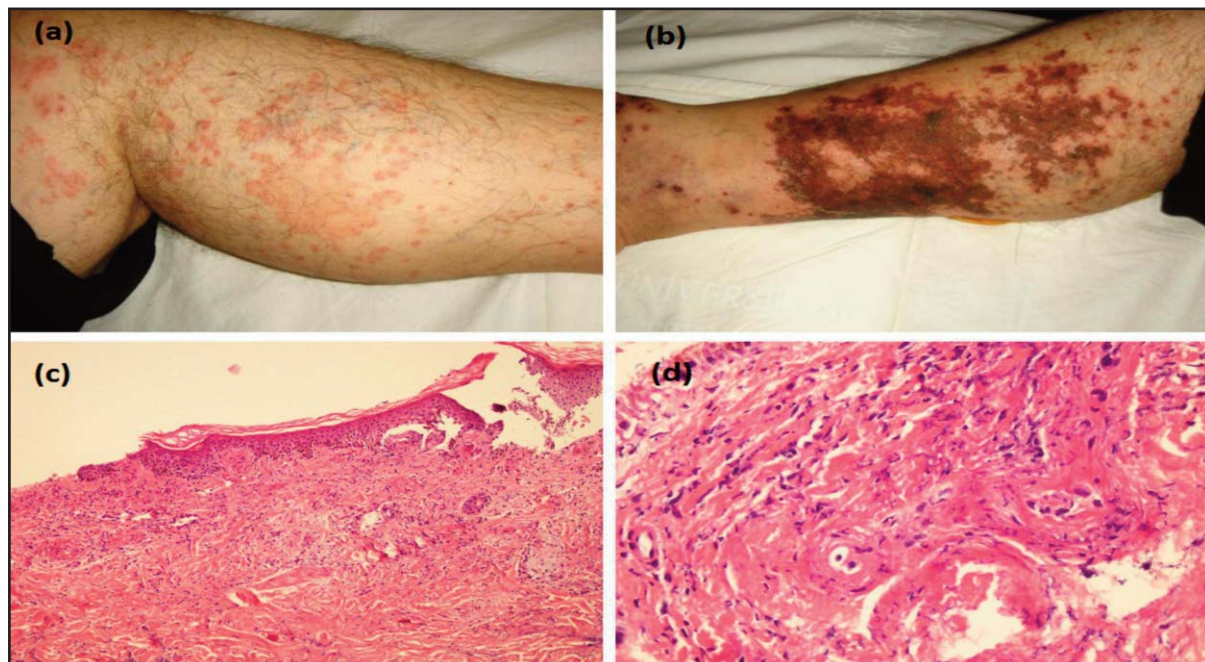


Penicillin-Induced Henoch-Schönlein Purpura In Adult Patient

To the Editor. - Henoch-Schönlein Purpura (HSP) is a systemic small-vessel leukocytoclastic vasculitis which usually evolves in pediatric group and clinically characterized by the classic clinical triad consisting of palpable purpura, joint symptoms, and abdominal pain. HSP in elder patients is less common disease. However, prognosis of HSP is poor in elder patients due to severity of renal involvement compare to childhood HSP [1]. HSP can damage joints, kidney and gastrointestinal system (GIS). But it can be also restricted to the skin. Most common precipitating factor of HSP is an upper respiratory tract infections (URTI) for pediatric group. Primary triggering factors of HSP in adult patients are drugs and malignancy [1]. β -lactam antibiotics are found more common triggering agents in one epidemiologic study [2]. Here we report a case, benzathine phenoxymethylpenicillin

induced HSP in elderly patient, which was restricted to the skin and demonstrated benign course.

57-year-old male patient hospitalized in our department due to necrotic skin lesions on both lower extremities. He received benzathine phenoxymethylpenicillin for two days, due to insect bite of periorbital region. The erythematous, itchy skin lesions evolved on malleolus of lower extremity and rapidly progressed proximally within ten days after the administration of oral antibiotic. Upon dermatological evaluation, superficial necrotic lesions on malleolus and tibia were noticed (**Figures 1a and b**). Itchy erythematous and palpable petechial skin lesions were detected on proximal lower extremities. The insect bite site was completely healed and there were no sign of petechia. He suffered from metabolic syndrome and used oral



Figures 1a, b, c and d. Palpable purpuras and necrotic skin lesions on tibia (a, b). Subepidermal splitting and perivascular fibrinoid necrosis, polymorphonuclear leukocytes dominated mixed infiltrate in dermis H&E x 40 (c). Perivascular fibrin deposition and polymorphonuclear leukocyte infiltration H&E x 200 (d).

antidiabetic and antihyperlipidemic drugs for five years.

Skin sample taken from petechial lesions showed fibrinoid necrosis and perivascular neutrophil infiltration in papillary dermis (**Figures 1c and d**). In direct immunofluorescence examination granular IgA deposition was found. So patient diagnosed as HSP. Routin blood test showed slight elevation in acute fase reactans, white blood cells and eosinophil count. Platelate count was normal. Complement levels were in normal range. ANCA and other autoimmun markers were normal. Immunoglobulin levels especially IgA were normal. Patient evaluated in terms of kidney, joint and GIS involvement of HSP. No abnormalities were found. Malignancy screening result was negative. There was no infectious source in our patient especially URI. So patient diagnosed according to EULAR/PRINTO/PRES diagnositic criterias as HSP, induced by drug in elder patient [3]. Patient was treated with short-term systemic corticosteroid and topical corticosteroid. The skin lesions resolved completely after 20 days. No recurrences and systemic involvement were detected during one year follow-up.

In our case benzathine phenoxymethylpenicillin was a possible triggering factor of HSP. There are few cases reported in the literature regarding drug induced HSP. In one case clarithromycin was a possible main cause of HSP purpura in 48-year-old male patient which involved skin, joints and kidney [4]. In other report, HSP with systemic involvement developed due to acetaminophen and codein intake in 69-year-old male patient [5]. There is also a case of HSP which was induced by penicillin [6]. To our knowledge this is the first case described penicilline induced HSP [6]. However, there is a report where HSP was evolved at the site of insect bite in pediatric patient [7]. Our patient also has a history of insect bite, however HSP evolved in our case at the far distant area from insect bite and there was no sign of petechial lesions on insect bite area. So, we concluded that HSP in this patient developed due to antibiotic.

In conclusion, HSP in adulthood usually shows severe clinical course and has a risk of development renal insufficiency. In our case, HSP evolved due to benzathine phenoxymethylpenicillin which was restricted to the skin and had a bening clinical course.

Mehdi Iskandarli,¹ MD
Banu Yaman,² MD
Taner Akalin,² MD
Can Ceylan,¹ MD

¹Ege University Faculty of Medicine, Department of Dermatology and Venereology,

²Ege University Faculty of Medicine, Department of Pathology

E-mail: nerman111@yahoo.com

References

1. Kang Y, Park JS, Ha YJ, et al. Differences in clinical manifestations and outcomes between adult and child patients with Henoch-Schönlein purpura. *J Korean Med Sci* 2014; 29: 198-203. PMID: 24550645
2. Calvo-Río V, Loricera J, Mata C, et al. Henoch-Schönlein purpura in northern Spain: clinical spectrum of the disease in 417 patients from a single center. *Medicine* 2014; 93: 106-113. PMID: 24646467
3. Yang YH, Yu HH, Chiang BL. The diagnosis and classification of Henoch-Schönlein purpura: an updated review. *Autoimmun Rev* 2014; 13: 355-358. PMID: 24424188
4. Borrás-Blasco J, Enriquez R, Amoros F, Cabezuelo JB, Navarro-Ruiz A, Pérez M, Fernández J. Henoch-Schönlein purpura associated with clarithromycin. Case report and review of literature. *Int J Clin Pharmacol Ther* 2003; 41: 213-216. PMID: 12776812
5. Santoro D, Stella M, Castellino S. Henoch-Schönlein purpura associated with acetaminophen and codeine. *Clin Nephrol* 2006; 66: 131-134. PMID: 16939070
6. Mirabel L, Mahon WE. Penicillin hypersensitivity reaction with purpura of Schönlein-Henoch type, acute nephritis, and angioneurotic oedema; obesity and diabetes mellitus (precipitated by infection). *Proc R Soc Med* 1951; 44: 150-151. PMID: 14834168
7. Sharan G, Anand RK, Sinha KP. Schönlein-Henoch syndrome after insect bite. *Br Med J* 1966; 12; 1: 656. PMID: 5908713