

Introduction

Henoch-Schönlein Purpura (HSP) is a systemic vasculitis mediated by IgA immunoglobulins. The disease classically affects children with immune-complex deposition around the skin, mucous membranes, and other internal organs. Antibody formation usually follows an inciting factor such as upper respiratory infection, environmental exposures, or medications. The classic tetrad of symptoms in children are palpable purpura in the lower extremities, polyarthralgia, renal compromise, and abdominal pain with bloody diarrhea. Cases with adults, though rare (2 per 100,000), have been reported. We present a case of HSP possibly triggered by a wasp sting.

Case Description

A 65-year-old female presented to the ED with a rash on her left leg with associated edema. Two days prior, she was stung by a wasp in her left lower extremity. She was discharged with topical steroids and then developed a pruritic rash in her bilateral lower extremities ascending to the back of her trunk and diffuse abdominal pain with diarrhea and multiple episodes of self-resolving melena that did not require blood transfusion. She returned to the ED with an elevated CRP (40) and WBC (14.4). CTA abdomen showed diffuse enteritis without ischemia. GI pathogen profile was negative and sigmoidoscopy revealed congested, erythematous eroded mucosa at the splenic flexure but with no signs of bleeding. Endoscopy showed multiple linear and circumferential non-bleeding duodenal ulcers with no stigmata of bleeding.

A rare diagnosis of HSP in an adult was considered given the palpable purpura in her lower extremities, polyarthralgia, and abdominal pain with bloody diarrhea. This was supported by a skin biopsy of her rash that was positive for perivascular IgA deposits. She was started on IV steroids with rapid improvement and was discharged with a two-week steroid taper.

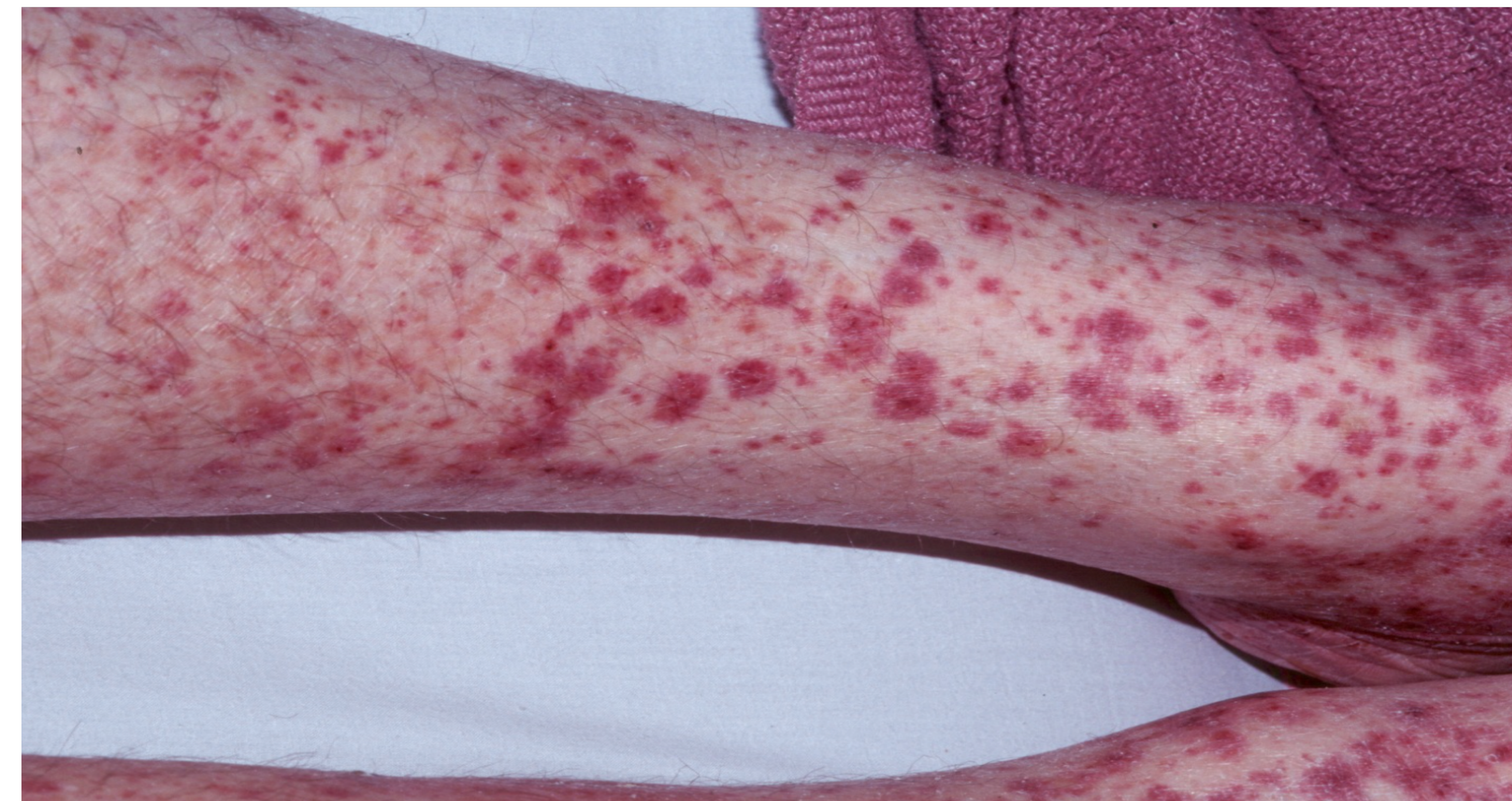


Figure 1. HSP-associated petechial rash, similar to the appearance of our patient

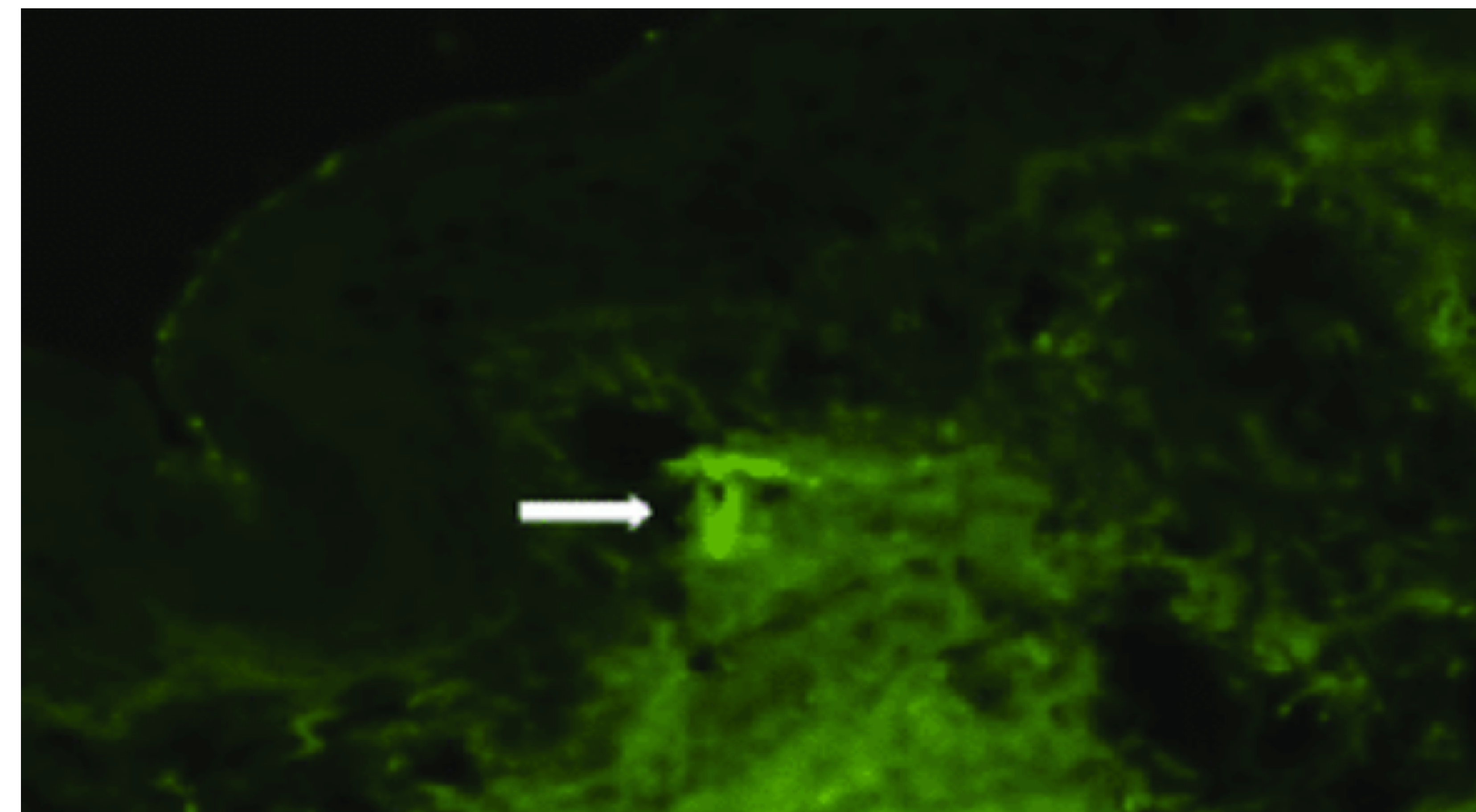


Figure 2. HSP-associated perivascular IgA deposition

Discussion

- HSP is much rarer in adults than children
- Studies and subsequent data regarding HSP in adults is limited
- Wasp stings may be a potential trigger for HSP

The etiology of HSP in adults is linked to a variety of triggers including:

- URI
- Medications (ie: nifedipine, diltiazem, cefuroxime, diclofenac)
- HIV, hepatitis B
- Autoimmune and environmental factors

Our patient denied recent infections, new medications or autoimmune disorders but had suffered a wasp sting the day before her rash developed. Bee stings are a known trigger in children, but there are no reported cases of wasp stings resulting in HSP in adults.

HSP is a common IgA-mediated vasculitis in children, but a rare disease in the adult population. Cohorts studied are limited to children and risk factors for adults need further study. Our patient demonstrated that wasp stings can be a potential trigger for HSP and further monitoring for similar cases in the adult population is warranted.

References

1. Dedeoglu F, Kim S. IgA vasculitis (Henoch-Schönlein purpura): clinical manifestations and diagnosis: uptodate. 2017.
2. Saulsbury FT (2001). "Henoch-Schönlein purpura". *Current Opinion in Rheumatology*. **13** (1): 35–40.
3. Matucci-Cerinic M, Furst D, Fiorentino D, et al. *Skin manifestations in rheumatic disease*. doi: 10.1007/978-1-4614-7849-2_39. New York: Springer Science+Business Media, 2014:321.
4. Sheth K, Bockorny M, Elaba Z, Scola C. Adult Onset Henoch-Schönlein Purpura: Case Report and Review of Literature. *Conn Med*. 2015 Feb;79(2):81-5. PMID: 26244205
5. Jithpratuck W, Elshenawy Y, Saleh H, Youngberg G, Chi DS, Krishnaswamy G. The clinical implications of adult-onset henoch-schonlein purpura. *Clin Mol Allergy*. 2011;9(1):9. Published 2011 May 27. doi:10.1186/1476-7961-9-9
6. Gálvez-Olortegui J, Álvarez-Vargas M, Durand-Vergara J, Díaz-Lozano M, Gálvez-Olortegui T, Armas-Ramírez I, Hilario-Vargas J. Henoch Schonlein purpura associated with bee sting: case report. *Medwave*. 2015 Oct 30;15(9):e6297. English, Spanish. doi: 10.5867/medwave.2015.09.6297. PMID: 26610057.
7. Rigante D, Castellazzi L, Bosco A, Esposito S. Is there a crossroad between infections, genetics, and Henoch-Schönlein purpura? *Autoimmun Rev*. 2013 Aug;12(10):1016-21. doi: 10.1016/j.autrev.2013.04.003. Epub 2013 May 15. PMID: 23684700.