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Itching Papules in a Child; Scabies or Henoch Schonlein Purpura?

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Abstract

Introduction

Henoch schonlein purpura (HSP) is a self-limited systemic disease with multiorgan involvement. While cutaneous involvement may wary, presenting as itching papules is not a common manifestation. In this report we discuss a case of HSP which was presented solely with itching papules; mistaken for scabies.

Case Presentation

A 7- year- old boy presented with itchy palpable papules without any gastrointestinal or urinary problem which was primary taught to be an ectoparasitic infestation. During the hospitalization the patient developed abdominal pain as well as hematuria and the diagnosis became more evident. The skin biopsy showed perivascular inflammatory cells infiltration in epidermis, perivascular fibrinoid necrosis and leukocytoclastic vasculitis. The patient received corticosteroids and discharged healthy.

Conclusion

While HSP may have different cutaneous manifestations, presenting as only itchy papules may complicate the diagnosis and physicians should always keep in mind that HSP might be presented as other common infestations unresponsive to treatment.

Key Words: Itching, Henoch-Schonlein Purpura, Scabies.

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Introduction

Henoch-Schonlein purpura (HSP) is a systemic, self-limited small vessel vasculitis with an unclear etiology which will present with multi organ involvement (1). The overall incidence of HSP is usually underestimated and varies geographically (1, 2). HSP is mostly reported in Asians and most patients are commonly seen in spring and winter (1). While most of HSP cases occurs in patients younger than 10 years, the peak incidence is between 4-6 years (1).

Classic tetrad of arthritis or arthralgia, nonthrombocytopenic palpable purpura, renal and gastrointestinal tract involvement is seen in HSP (1). Skin lesions in HSP will evolve from erythematous macular wheels to palpable purpura with ecchymosis and petechiae (1). Atypical skin manifestation of HSP might be mistaken for urticaria, meningococcemia, dermatitis herpetiformis and systemic lupus erythematosus (3). However, isolated itching papules are rarely reported in HSP. In this report we will present a case of HSP presented with isolated itching papules which was mistaken by ectoparasitic infestation.

Case Report

A 7- year Caucasian boy visited a pediatrician because of itchy papules from 10 days ago. The skin manifestations were began from ten days ago; involving upper and lower extremities as well as buttock and finally the trunk; sparing head and neck. Figure.1 shows macules and papules on patient's feet and (Figure.2) shows the same lesions on patient's hands. In both figures hemorrhagic crusts are visible. There was also arthralgia of right wrist which was recovered spontaneously 3 days before admission. The patient wasn't ill and had stable vital signs. There wasn't any sign of gastrointestinal or urinary problems. While the patient had used various antihistamines as well as topical creams and the itching was seriously bothering both mother and child, we decided for admission. The patient got antihistamines and topical corticosteroids, but the symptoms hadn't resolved. Because of skin manifestation and lack of other systemic findings, ectoparasitic infestations such as scabies came into conclusion. While the itches decreased, the patient got fever and mild periumbilical abdominal pain accompanied with arthralgia.

The complete blood count and urinalysis were both unremarkable. Also abdominal sonographic study did not reveal any pathologic finding. A skin biopsy was taken and perivascular inflammatory cells infiltration was seen in epidermis. Also tiny perivascular fibrinoid necrosis and leukocytoclastic vasculitis was reported. According to pathological report, abdominal pain, arthralgia and cutaneous lesions the diagnosis of HSP became more apparent. During the hospital stay the patient also got microscopic isolated hematuria. The patient was treated by adequate hydration and 1mg/kg/day corticosteroid and the dose was tapered within 2 weeks. The patient was discharged healthy without any abdominal pain or arthralgia and almost vanished skin lesions. As the patient got microscopic hematuria, a close follow up for 6 months was recommended.

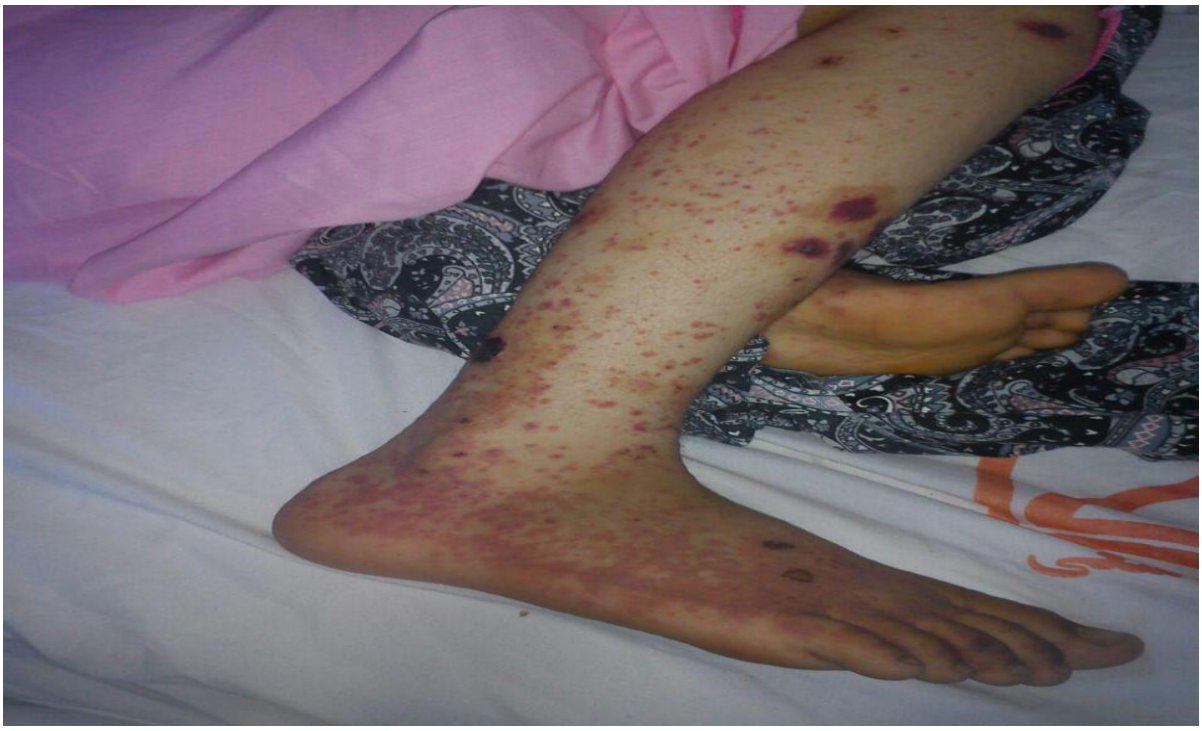

Fig .1: Cutaneous manifestations presented as itchy macules, papules and hemorrhagic crusts in lower extremities

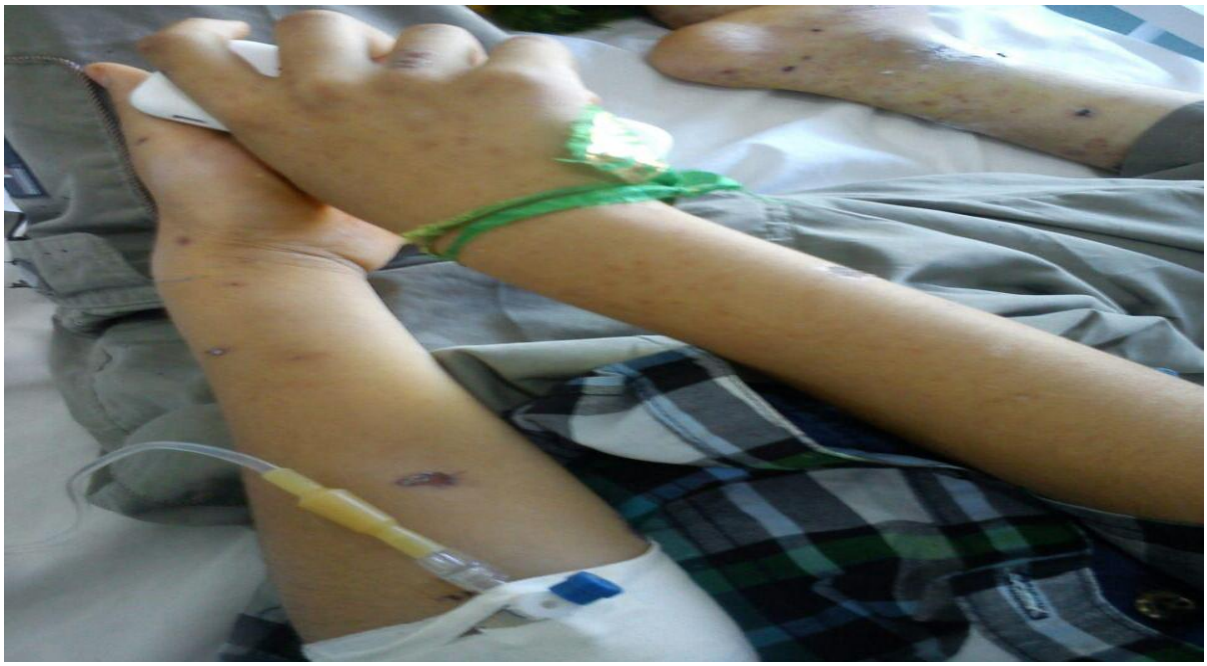

Fig. 2: Itchy macules, papules and hemorrhagic crusts were also visible in Upper extremities

Discussion

HSP is the most common vasculitis of childhood(3). There are various etiologies reported for HSP. Autoimmune mechanisms, viral and bacterial infections, as well as drugs and vaccinations are reported as possible causes(1). Our patient didn't have any remarkable history of

previous infection or either vaccination. Non thrombocytopenic palpable purpura with involvement of joints, kidney or gastrointestinal tract may take HSP into consideration(1). However, not all of these findings are always presented in an ordinary manner. Classical skin involvement is seen in half of patients and can be urticarial, hemorrhagic or even ecchymotic as well as palpable purpura (4). Half of the patients may have palpable purpura persist up to 10 days and rarely there might be dermal scarring, ulceration or hemorrhagic bullae(1).

The cutaneous manifestations are often symmetric and seen in pressure dependent areas(5). These various cutaneous findings regardless of other organ involvement might be mistaken with other medical conditions such as urticaria, meningococcemia, dermatitis herpetiformis and systemic lupus erythematosus(3). While scabies is a common ectoparasitic infestations in our region which usually present with itching (6) and there isn't any report of HSP presented with itching, we suggest that ectoparasitic infestations such as scabies can also be a differential diagnosis of HSP. Identifying scabies mite is challenging even for experienced clinical staffs and negative results can't roll out the infestation (7). There are other rare cases of HSP with especial cutaneous findings. Penile skin involvement as erythema, edema, ecchymosis or even induration is also reported in HSP(8). Hemorrhagic vesicle bullous lesions are another rare cutaneous presentation of pediatric HSP(9). Calf swelling and orchitis are two other uncommon findings(10). Abdominal wall and labial edema is also reported as complications(11) and Koebner phenomenon can rarely be seen in HSP(12). In suspicious cases with atypical or incomplete lesions, skin biopsy is indicated(13). Immune complexes will deposit in vessel walls, resulting in neutrophil accumulation and inflammation(1).

Skin biopsy shows leukocytoclastic vasculitis and perivascular infiltration of mononuclear and polymorph cells(14). Haematoxylin and eosin stains will demonstrate classic leukocytoclastic vasculitis with Immunoglobulin A (IgA) depositions(5). The diagnosis will be confirmed by immunofluorescence study(5). IgA deposit at vessels is especially useful in diagnosing atypical forms of HSP(13). The management is often supportive and can be managed as outpatients with adequate pain relief and prevent dehydration(5). Nonsteroidal anti-inflammatory drugs are used for treating arthralgia and systemic corticosteroids can help in reducing abdominal symptoms and arthritis(3).

Conclusion

HSP can manifest with verity of cutaneous manifestations. When presenting only with cutaneous finding, making a successful diagnosis can be difficult. It's important to think about HSP in pediatric cases presented with itching papules while also considering more common medical conditions such as scabies or other infestation in a healthy child.

Conflict of Interest: None.

Acknowledgment: None.

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