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CORRESPONDENCE

Postpartum polymorphic eruption of pregnancy prominently occurring on striae distensae

Dear Editor,

Polymorphic eruption of pregnancy (PEP),[1] also known historically as pruritic urticarial papules and plaques of pregnancy,[2] is one of the characteristic gestational dermatoses. PEP usually affects primigravidas in their third trimester of pregnancy and rapidly resolves in first weeks of postpartum.[1–5] Intensely pruritic urticarial papules, that quickly coalesced to form plaques, initially occur on the abdomen and/or proximal thighs and usually spread to the buttocks, chest, back, and peripheral limbs.[1–5] PEP lesions are initially localized within or adjacent to striae distensae particularly on the lateral aspects of the abdomen.[1–4] It has been documented that PEP has documented to occur occasionally in the postpartum period.[6,7] This onset timing may annoy us upon diagnosis of PEP. Here, we report a case of PEP, whose lesions were developed after delivery. Her postpartum PEP was strikingly localized in association with striae distensae.

A 27-year-old primigravida was referred to us for evaluation of her skin lesions. One week after delivery of a first female baby, she developed an eruption on the abdomen, extending to the thighs. There was neither fetal nor maternal problem, except for the mother's transient anemia improved by one-dose blood transfusion. She had a history of mild childhood atopic dermatitis. According to her personal photographs, there were multiple reddish papules strikingly congruous with striae distensae on the right (Figure 1a) and left abdomen (Figure 1b) at 1 week postpartum. Some papules were also scattered adjacent to striae distensae. On our first examination, at 3 weeks postpartum, her height was 160 cm and weight 76 kg. Since she weighed 60 kg before pregnancy, she got excessive maternal weight gain. The papular eruption was extended to thighs (Figure 1c) and axillae, where striae distensae existed. White dermographism was found on the skin. On blood examination, leukocyte and eosinophil counts, and liver and renal functions were within limits. The levels of IgE (297 IU/L; normal,

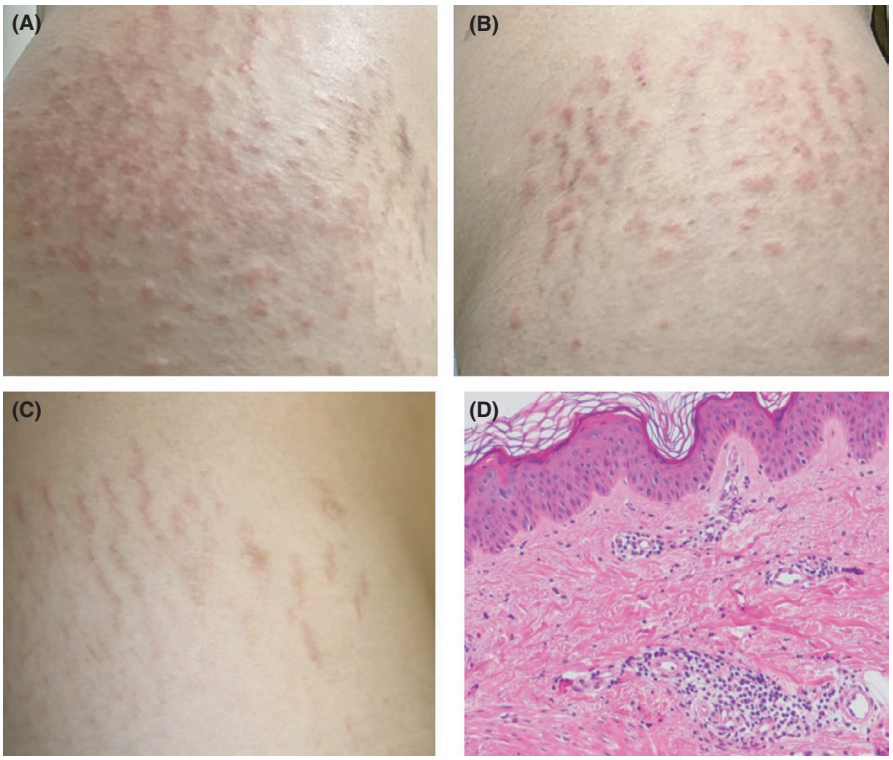

FIGURE 1 Clinical appearance and histopathological findings. Multiple papules on the right (A) and left aspects (B) of the abdomen at 1 week postpartum. The popular eruption was extended to the thigh (C) at 3 weeks after delivery. Histopathology, showing mild hyperkeratosis and perivascular infiltration of lymphocytes and eosinophils (D)

<170 IU/L) were slightly high, and specific IgE for both mite and cedar allergens was class 4' for better readability. Anti-BP180 antibodies were negative. A biopsy specimen taken from the abdomen showed mild hyperkeratosis and a perivascular infiltrate of lymphocytes intermingled with eosinophils in the upper dermis, where mild edema was present (Figure 1d). After 3-week treatment with topical very strong-class corticosteroids, the eruption was improved without sequelae.

Polymorphic eruption of pregnancy usually occurs before delivery and disappears within 4–6 weeks postpartum,[1,2] but postpartum individuals occasionally develop PEP 1–2 weeks after delivery[4,6,7] as seen in our case. Pemphigoid gestationis was negated by negative anti-BP180 antibodies.[7] Atopic eruption of pregnancy was also ruled out because her eruption was formed on striae distensae.[7] Nevertheless, the patient's atopic background was a possible exacerbating factor.

Although the etiology of PEP remains unclear, one of the most important factors is deposition of fetal DNA in the third trimester. This peripheral chimerism might be caused by increased vascularity, leading to an immune response.[8] Given this scenario, patients could develop PEP even in the postpartum period. Striae provide a site for koebnerization of skin diseases.[9] It should be kept in mind that PEP manifests marked inflammation of striae distensae even after delivery.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

DECLARATION SECTION

Approval of the research protocol: N/A.
Informed consent: N/A.
Registry and the Registration No. of the study/trial: N/A.
Animal Studies: N/A.

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