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Atypical Pruritic Urticarial Papules and Plaques of Pregnancy- A Case Report

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INTRODUCTION

Pruritic urticarial papules and plaques of pregnancy (PUPPP) typically occur during the first pregnancy in the third trimester [1,2]. Papules and plaques of PUPPP are usually found on the abdomen within the striae associated with pregnancy but can extend to the limbs as well [1,3]. PUPPP is characterized by erythema as well as pruritic papules and plaques.

Symptomatic treatment with oral antihistamines and topical corticosteroids preparations is usually offered to the pregnant mother as this eruption usually resolves rapidly within one to two weeks postpartum [2,3]. Persistence of the eruptions post-partum is rare. No risks or detrimental effects have been identified. Therefore, the perinatal outcome is excellent for both the mother and new-born baby [3,4].

This case report will review an unusual case of persistent PUPPP at 12 years post-partum in a 43 years old woman who continued to suffer from abrupt symptomatic outbreaks associated with PUPPP without any clear respite. This is unusual because 90% of PUPPP cases remit spontaneously with no recurrences.

Keywords: Pruritic, Papules, Plaques of Pregnancy, Common, Chronicity, Corticosteroids, Good Outcome, Persistent, PUPPP

CASE PRESENTATION

A 43-year-old woman was seen at a charity medical screening clinic in Kuala Lumpur presenting with symptoms of acute upper respiratory tract infection. The patient also reported that the skin lesions found on her trunk and limbs were giving her insomnia due to continuous symptomatic outbreaks, predominantly including itchiness.

Upon further questioning, the patient claimed that the lesion started during the final trimester of her first pregnancy 12 years ago and had persisted ever since except for lesions over the abdomen, which has remitted in the post-partum period. She was prescribed oral antihistamines and topical cortico-steroids once during that time. However, the lesions did not subside. As she was worried about the effects of the drugs might have on her fetus, she declined further treatment and decided to make do with her predicament.

She had an uneventful spontaneous vaginal delivery with no peripartum complications. She reported no food or drug allergies, and she is not on any regular medications. She has no personal or family history of atopy.

Examination revealed multiple hyperpigmented scars over the trunk and limbs with the presence of papular lesions. A papular lesion over the right lower limb (shown with arrow) was discharging clear fluid, clearly indicating that the lesions were still active (Figures 1 and 2).

The patient was referred to the dermatology clinic of the government general hospital in Kuala Lumpur as a result of the severity and chronicity of her symptoms for diagnosis confirmation through skin biopsy, and continuation of follow up. However due to financial limitations and other restrictions, she declined dermatological consultation which contributed further to the diagnostic challenges in this case.

She was therefore, treated with oral antihistamines (oral cetirizine 10mg daily) and topical corticosteroids (betamethasone valerate

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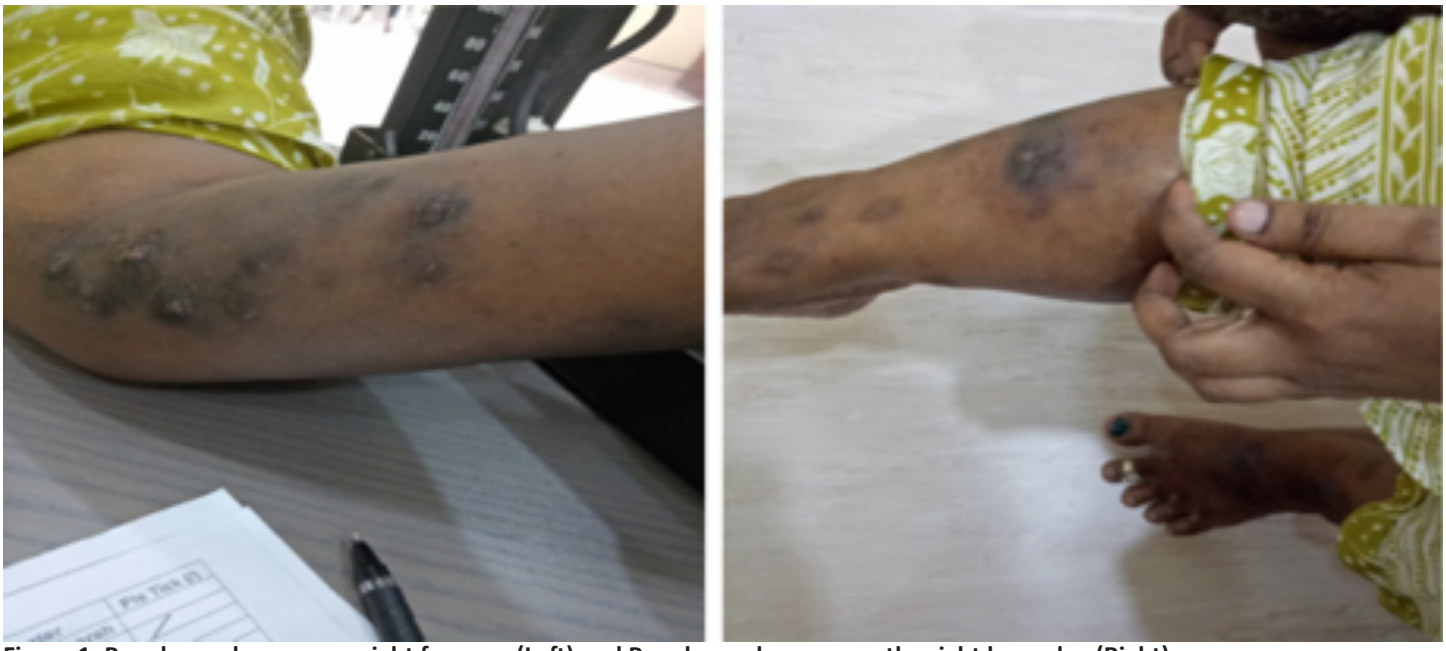

Figure 1: Papules and scars over right forearm (Left) and Papules and scars over the right lower leg (Right)

cream twice a day) for two weeks and instructed to return for further consultation after three weeks for the next free medical clinic session to review her progress. The patient was also advised to go to the nearest government health clinic if her condition worsened.

She was seen again six weeks later where there was marked improvement over the lesions. She was advised to take the antihistamines when necessary while applying aqueous cream at least three times a day to hydrate her skin and reduce the risk of having itchiness.

DISCUSSION

PUPPP is a benign condition that rarely persist in the postpartum period although onset in the post-partum period have been reported [5]. Treatment is usually straight-forward with topical corticosteroids being the mainstay supplemented by oral antihistamines that are approved for the use in pregnant women [6].

As noted above, chronicity of this condition is rare. In cases presenting with severe symptoms, health practitioners should provide high potency topical corticosteroids and/or oral corticosteroids [6].

A referral to a dermatologist is needed in severe and recalcitrant cases for confirmation of diagnosis and upscaling of the treatment if needed. Insomnia, as seen in this case, was caused by presence of multiple chronic skin lesions that had sporadic outbreaks and caused the patient to have sleepless nights. A case report by Kim EH et al. noted that stress and insomnia of PUPPP persist-ing in the postpartum period may cause distress in the breastfeeding mother, thereby necessitating aggressive treatment [5]

The prognosis of PUPPP remains excellent with the majority of cases alleviated within six weeks postpartum with no mortality [6-8]. Recurrences are also rare, with 7% of pregnant women reporting recurrences [9].

In conclusion, the primary educational outcome from this case is that physicians have to identify cases that may benefit from treatment with stronger steroid agents in order to prevent persistence beyond the post-partum period.

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REFERENCES

1. Giugliano E, Cagnazzo E, Servello T, Mossutu E, Marci R, Patella A, " Pruritic urticarial papules and plaques of pregnancy," Journal of Obstetrics and Gynaecology; vol. 32, pp. 301-2, 2012
2. Dehdashti AL, Wikas SM, " Pruritic urticarial papules and plaques of pregnancy occurring postpartum," Cutis; vol. 95,no.6, pp.344-7, 2015
3. Tunzi, M., Gray, GR, "Common skin conditions during pregnancy," Am Fam Physician; vol. 72, no. 2, pp. 211, Jan 2007
4. Ohel I, Levy A, Silberstein T, Holcberg G, Sheiner E," Pregnancy outcome of patients with pruritic urticarial papules and plaques of pregnancy," The Journal of Maternal-Fetal & Neonatal Medicine; vol. 19, no. 5, pp. 305-8, 2006
5. Kim EH, "Pruritic urticarial papules and plaques of pregnancy occurring postpartum treated with intramuscular injection of autologous whole blood," Case reports in dermatology; vol.9,

no. 1, pp. 151-6, 2017
6. Medscape, "Polymorphic Eruption of Pregnancy," Available http://emedicine.medscape.com/article/1123725-overview . Accessed Sept. 10 2017.
7. Callen JP, Hanno R," Pruritic urticarial papules and plaques of pregnancy (PUPPP): A clinicopathologic study," Am Acad Dermatol.; vol. 5, no.4, pp. 401-5, 1981
8. Rudolph CM, Al-Fares S, Vaughan-Jones SA, Mullegger RR, Kerl H, Black MM," Polymorphic eruption of pregnancy: clinicopathology and potential trigger factors in 181 patients," Br J Dermatol.; vol. 154, no. 1, pp. 54-60, 2006
9. Ambros-Rudolph CM, Mullegger RR, Vaughan-Jones SA, Kerl H, Black MM," The specific dermatoses of pregnancy revisited and reclassified: results of a retrospective two-center study on 505 pregnant patients," J Am Acad Dermatol.; vol. 54, no. 3, pp. 395-404, 2006
10. Gagnier JJ, Kienle G, Altman DG, Moher D, Sox H, Riley D et al, "The CARE guidelines: Consensus-based clinical case reporting guideline development," BMJ Case Rep., vol. 53, no. 10, pp. 1–4, 2013.