

Targetoid form of Polymorphic Eruption of Pregnancy: A case report

SAGE Open Medical Case Reports
JCMS Case Reports
Volume 7: 1–2
© The Author(s) 2019
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/2050313X19882841
journals.sagepub.com/home/sco



Michal Bohdanowicz¹, Danny Ghazarian²
and Cheryl F Rosen¹

Abstract

Polymorphic Eruption of Pregnancy, formerly known as Pruritic and Urticarial Papules and Plaques of Pregnancy, is an uncommon cutaneous eruption that can affect women during their third trimester of pregnancy. As its name implies, it has a variety of morphologies and it is important to consider other diagnoses, such as Pemphigoid Gestationis, which Polymorphic Eruption of Pregnancy can mimic. Sometimes, as in this case, Polymorphic Eruption of Pregnancy can have a targetoid morphology reminiscent of erythema multiforme. A thorough workup and conservative management plan helps reassure the patient that the correct approach is being taken during the challenging period of a pregnancy nearing completion.

Keywords

Polymorphic Eruption of Pregnancy, Pregnancy related skin conditions

Introduction

Pregnant women may present with a variety of cutaneous eruptions. Beyond adding extra stress during a physiologically and psychologically demanding period, the eruptions can place the mother or fetus at risk for significant complications. Polymorphic Eruption of Pregnancy (PEP) is a gestational eruption that is bothersome but not dangerous. However, it can sometimes mimic more dangerous eruptions and make the patient (and sometimes the clinician) anxious.

Case report

A 36-year-old G2P0TA1 at 34 weeks gestation with mono-chorionic-diamniotic twins presented with a 1-week history of a widely distributed pruritic eruption. It started on her abdomen and quickly spread to affect her arms, legs and back. It spared her umbilicus, palms, soles and face. Her mucosal membranes were uninvolved. She was otherwise healthy, and her past medical history was non-contributory. She did not take any medications besides prenatal vitamins. Her family history was negative for atopy.

On examination, she looked uncomfortable but systemically well. She had scattered erythematous papules, coalescing into plaques on her abdomen (Figure 1(a)), back and legs with sparing of the periumbilical area. On the arms, she had multiple erythematous targetoid plaques (Figure 1(b)). The differential diagnosis included PEP, erythema multiforme, acute spontaneous urticaria and Pemphigoid Gestationis (PG).

A biopsy was performed for routine histology and direct immunofluorescence was done to rule out PG. The hematoxylin and eosin (H&E) slide demonstrated findings consistent with PEP (Figure 2). The direct immunofluorescence was negative. The patient was prescribed 0.1% betamethasone valerate cream and an oral antihistamine. On follow-up 4 weeks later, she reported that she had delivered healthy twins at 35 weeks after a planned induction without complications and her skin eruption had completely resolved.

Discussion

PEP is pruritic cutaneous eruption associated with pregnancy. It usually occurs in the third trimester or immediate postpartum period. Risk factors for PEP include twin pregnancies and rapid weight gain.¹ It has a range of morphologies, particularly erythematous urticarial papules and plaques. It is usually pruritic and it most often begins on the abdomen but spares the umbilicus. The targetoid form of PEP occurs in about 5% of patients with the disease² and,

¹Division of Dermatology, Toronto Western Hospital, University Health Network, University of Toronto, Toronto, ON, Canada

²Department of Laboratory Medicine and Pathobiology, University Health Network, University of Toronto, Toronto, ON, Canada

Corresponding Author:

Cheryl F Rosen, Division of Dermatology, Toronto Western Hospital, 8 East-471, 399 Bathurst St, Toronto, ON M5T 2S8, Canada.
Email: cheryl.rosen@uhn.ca





Figure 1. (a) Erythematous papules and plaques located on the patient's abdomen. The papules and plaques favour the striae and spare the umbilicus. (b) The plaques on the arms are targetoid and reminiscent of erythema multiforme.

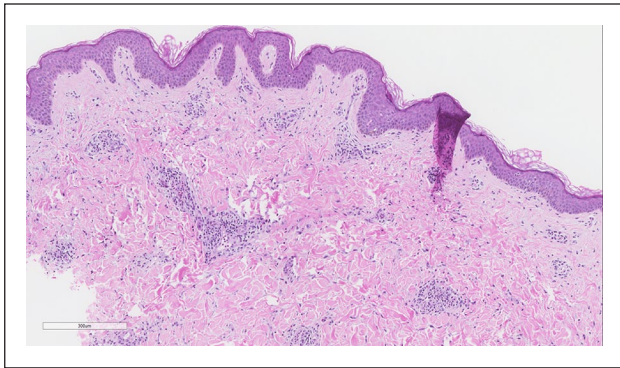


Figure 2. Biopsy of lesional skin shows a superficial perivascular infiltrate of lymphocytes, histiocytes and occasional eosinophils. Focal, mild spongiosis is present. Subepidermal blistering is absent (Hematoxylin and eosin, 40 \times). Direct immunofluorescence of perilesional skin was negative (not shown).

like other forms of PEP, the targetoid form has a benign, self-limited course, generally resolving within 1 week after delivery. Importantly, the targetoid morphology raises the possibility of erythema multiforme. Erythema multiforme may be painful rather than pruritic. Nevertheless, a biopsy for H&E and direct immunofluorescence should be considered to rule out conditions that may affect the fetus such as

PG. PEP has no direct effects on the fetus. It is usually treated symptomatically with oral antihistamines and topical corticosteroids. Systemic corticosteroids may be required when the disease is extensive.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Informed consent

The patient provided consent for publication of her case and photos.

References

1. Rudolph CM, Al-Fares S, Vaughan-Jones SA, et al. Polymorphic eruption of pregnancy: clinicopathology and potential trigger factors in 181 patients. *Br J Dermatol* 2006; 154(1): 54–60.
2. Sirikudta W and Silpa-Archa N. Polymorphic eruption of pregnancy presented with targetoid lesions: a report of two cases. *Case Rep Dermatol* 2013; 5(2): 138–143.