

## Case Report

# Impetigo herpetiformis: an unknown dermatosis of pregnancy

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### ABSTRACT

Impetigo herpetiformis or pustular psoriasis of pregnancy is a rare dermatosis of pregnancy that typically starts in the second half of pregnancy and resolves postpartum. It can be life threatening for both mother and fetus and often causes therapeutic problem. We report a case of 37-year-old pregnant woman with history of generalized pustular lesions in the two previous pregnancies, presenting an impetigo herpetiformis during her third pregnancy, resolved one day after the delivery.

**Keywords:** Impetigo herpetiformis, Pregnancy, Postpartum, Women, Delivery

### INTRODUCTION

Impetigo herpetiformis or pustular psoriasis of pregnancy is a rare dermatosis of pregnancy that typically starts in the second half of pregnancy and resolves postpartum.<sup>1</sup> It can be life threatening for both mother and fetus and often causes therapeutic problem.<sup>2</sup> We report a case of 37-year-old pregnant woman with history of generalized pustular lesions in the two previous pregnancies, presenting an impetigo herpetiformis during her third pregnancy, resolved one day after the delivery.

### CASE REPORT

We report a case of 37-year-old Moroccan pregnant woman, gravida 3 parity 3, who had a history of generalized pustular lesions in the last weeks of the two previous pregnancies, resolved in postpartum, without any clinical symptoms between pregnancies. She had no family history of psoriasis. She presented at 34 weeks period of gestation generalized pustular lesions evolving since two weeks. Physical examination showed large

erythematous lesions covered with thick white dander, surrounded by peripheral grouped, non-follicular pustules over the entire body, with a skin surface estimated at 45% (Figure 1). Laboratory investigation revealed leukocytosis of 12980/mm<sup>3</sup>, an iron deficiency anemia with 8.5 g/dl of hemoglobin and ferritin of 9 ug/l. Serum levels of sodium, potassium and calcium were normal. Serum bilirubin and liver enzymes were normal. Sedimentation rate was 138 mm in the first hour, and C reactive protein was 72 mg/l. There was no systemic or local infection focus according to examination and laboratory findings. A biopsy revealed spongiform intraepidermal and subcutaneous sterile pustulosis. Obstetric ultrasound yielded progressive monofetal pregnancy with positive cardiac activity at 34th week of gestation. Clobetasol propionate was applied on the lesion. During her fourth day at the hospital, the patient had contractions. After fetal maturity on steroid, she gave birth vaginally to a girl with a weight birth of 3 kg with appearance, pulse, grimace, activity and respiration (APGAR) score of 8 at 1 minute, 9 at five minutes and 10 at 10 minutes. Lesion disappeared one day after delivery with no recurrence later.



**Figure 1 (A and B): pustules of the trunk.**

## DISCUSSION

Impetigo herpetiformis is a variant of pustular psoriasis, a specific dermatosis that occurs in pregnancy with the onset being in the third trimester in majority of the cases.<sup>1</sup> Historically, it has been erroneously called impetigo herpetiformis, but the disease is not related to any bacterial colonization or herpes simplex virus.<sup>3</sup> The etiology and pathogenesis of impetigo herpetiformis is not completely understood but may be related to hormonal changes in pregnancy, particularly progesterone. Hypocalcemia and hypoparathyroidism are considered to be aggravating factors. It is clinically manifested as erythema and pustular eruptions (usually without pruritus) and resolves postpartum. Recurrence in subsequent pregnancies is common and has been reported. In such cases, the disease tends to be more severe and occur at an earlier gestation. Our patient had a recurrence of impetigo herpetiformis in her third pregnancy which resulted in a still birth.<sup>1</sup> Most cases have been successfully treated with oral or/and topic steroid, which is considered the first line treatment. Successful treatment with cyclosporine has been reported and this regime can be used as second line treatment. Antibiotics may be used to prevent and treat infections. It is reported that taking parenteral calcium, vitamin D, infliximab and pyridoxine in high doses, as well as

chorionic gonadotropin, is effective for impetigo herpetiformis during pregnancies. Taking methotrexate, retinoids (such as acitretin) and ultraviolet A may be helpful for treatment of impetigo herpetiformis after delivery.<sup>4</sup> Infliximab seems to work well in a few case reports.<sup>5</sup> In conclusion Impetigo herpetiformis start in pregnancy and resolve postpartum, with risk of recurrence in subsequent pregnancies. It is a different entity from classic pustular psoriasis, explaining its resolution after delivery.

## CONCLUSION

Impetigo herpetiformis or pustular psoriasis of pregnancy is an unknown dermatosis of pregnancy which can be life threatening for both mother and fetus, requiring good monitoring and appropriate care.

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## REFERENCES

1. Wamalwa EW. Recurrent impetigo herpetiformis: case report. *The Pan African Med J.* 2017;27.
2. El Fiboumi A, Chiheb S. Impetigo herpetiformis: a rare dermatosis of pregnancy. *The Pan African Med J.* 2018;30.
3. Trivedi MK, Vaughn AR, Murase JE. Pustular psoriasis of pregnancy: current perspectives. *Int J Women's Health.* 2018;10:109.
4. Namazi N, Dadkhahfar S. Impetigo herpetiformis: review of pathogenesis, complication, and treatment. *Dermatol Res Pract.* 2018;2018.
5. Ogrum A, Takci Z, Seckin HY, Cetin E. Treatment resistant impetigo herpetiformis treated with infliximab. *Dermatologic therapy.* 2019;32(2):e12839.

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