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CASE FOR DIAGNOSIS

Pustular Eruption in a Pregnant Woman

Erupción pustulosa en embarazada

Medical History

A 22-year-old woman in the 32nd week of her first pregnancy, with no dermatological history of interest and who reported taking no medication, was seen for a 2-week history of widespread, itchy, scaly, erythematous lesions and pustules on the trunk and limbs; the lesions were spreading and becoming more intense. She reported occasional episodes of fever and vomiting, and the only treatment she had taken was oral dexchlorpheniramine, without improvement.

Physical Examination

There were multiple, confluent, poorly defined erythematous plaques (Figure 1), with numerous pustules a few millimeters in diameter (Figure 2) and discrete desquamation on the trunk and limbs that did not affect the palms, soles, or mucosas.

Histology

Biopsy revealed the presence of a subcorneal, intraepidermal pustule with numerous neutrophils (Figure 3). In addition, foci of hyperkeratosis and parakeratosis were observed in the epidermis, with neutrophil exocytosis and mild spongiosis.



Figure 2

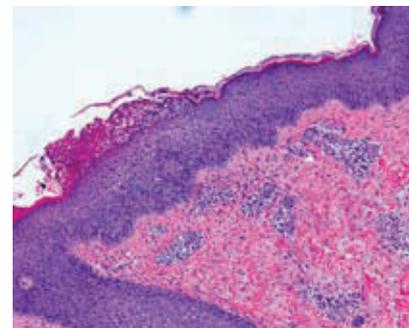


Figure 3



Figure 1

In the dermis there was mild edema and a moderate perivascular and interstitial inflammatory infiltrate formed of lymphocytes and occasional neutrophils.

Additional Tests

The initial blood tests revealed moderate anemia, a fall in the total serum calcium, and hypoalbuminemia. The other biochemical and immunological parameters were normal. The serum calcium levels were normal in subsequent blood tests.

What Is Your Diagnosis?

Diagnosis

Impetigo herpetiformis or pustular psoriasis of pregnancy.

Clinical Course and Treatment

Treatment was prescribed with topical and oral corticosteroids (prednisone at a dose of 0.5 mg/kg/d). There was an initial improvement but the lesions subsequently worsened and it was therefore decided to induce labor in the 35th week of pregnancy. After delivery, the lesions resolved almost completely. The patient suffered a further, less severe exacerbation 5 to 6 weeks after delivery, with widespread, scaly, erythematous plaques that resolved completely after treatment with topical corticosteroids. After a year of follow-up, the patient remained asymptomatic.

Discussion

Impetigo herpetiformis was described by von Hebra in 1872 as a rash of circinate erythematous plaques with numerous peripheral pustules occurring in women in the third trimester of pregnancy. It typically begins in the intertriginous areas and spreads centrifugally.^{1,2} The skin condition is associated with general symptoms (fever, vomiting, diarrhea, and asthenia), and blood tests reveal abnormalities such as leukocytosis, a raised erythrocyte sedimentation rate, hypoalbuminemia, and hypocalcemia that can be severe enough to cause tetany, convulsions, and maternal death,¹⁻⁴ as well as placental insufficiency, growth delay, and fetal distress and death.

Initially, impetigo herpetiformis was believed to be specific to pregnancy as it usually appeared in the third trimester of gestation in women with no personal or family history of psoriasis and resolved after delivery or the puerperium, with a tendency to recur earlier and with greater intensity in subsequent pregnancies.^{4,5} Currently, it is generally accepted that the disease is a variant of psoriasis and the preferred term is pustular psoriasis of pregnancy.^{1,3}

In our patient, the lesions did not present the typical circinate appearance of impetigo herpetiformis, and we therefore initially considered other pustular rashes in the differential diagnosis, particularly acute generalized exanthematous pustulosis, which can be indistinguishable from pustular psoriasis from a clinical and histological point of view. Our patient had no history of drug treatment and no apparent symptoms of infection. This, associated with presence of foci of parakeratosis, the absence of eosinophils and of keratinocyte necrosis, and a slowly progressive improvement after delivery—with a further exacerbation during the puerperium—made us consider the condition to be more suggestive of pustular psoriasis of pregnancy.

The preferred treatment for pustular psoriasis of pregnancy is the induction of labor.¹ If this is not possible due to fetal prematurity, the first choice of treatment is systemic corticosteroid therapy and second-line treatment is ciclosporin.⁶ A few cases have been treated with UV-B phototherapy and, after delivery, with methotrexate, oral retinoids, retinoids plus psoralen plus UV-A,^{2,7} or infliximab.⁸

Pustular psoriasis of pregnancy or impetigo herpetiformis is a rare disease. Although the mortality has now fallen due to the advances in treatment, it is important to recognize and diagnose the disease and detect the possible associated alterations in the blood tests. Appropriate treatment is necessary to avoid maternal and fetal morbidity.

Conflicts of Interest

The authors declare no conflicts of interest.

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