Pemphigus in Pregnancy

Sir,

Pemphigus has an incidence which varies from 0.5 to 3.2 cases per 100,000 of the population per year (1); in the 20–30 year age span it is estimated at 1–8.8% (2). The occurrence of this autoimmune bullous disease in pregnancy is exceedingly rare. Pemphigus in pregnancy is clinically so similar to herpes gestationis that only pathological evaluation and immunofluorescence assay may settle the clinical doubt. Pemphigus lesions in pregnancy may assume a heavy erythematous halo, while herpes gestationis may present oral lesions in 10–20% of cases, thus contributing to possible misdiagnosis. Pemphigus in pregnancy involves a high risk of stillbirth (14–27%) (3, 4), raising problems related to the management of the disease from a therapeutical and obstetrical viewpoint.

CASE REPORT

A 27-year-old gravide II was admitted in the 29th week of pregnancy for a severe non-pruritic bullous dermatitis mainly involving her abdomen (Fig. 1). The dermatitis had begun 20 days earlier, but the patient had been complaining of mouth soreness and faringodinia since the third month of pregnancy. The clinical pattern strongly suggested herpes gestationis, but the histopathological examination and direct immunofluorescence (deposition of IgG and C3 in the intercellular spaces) were consistent with the diagnosis of pemphigus. All the ematochemical parameters and hormonal battery related to the period of pregnancy were normal except for a hypochromic hyposidermic anemia. The woman's haplotype was HLA-A3, A31, B12, B16, W6, DR4, DR5, DQW1, DQW3. Obstetrical evaluation revealed a physiological pregnancy; absence of malformation and normal fetal growth were ascertained by means of ultrasound. Ultrasound examinations every 2 weeks, weekly non-stress tests from the 35th week and cervical and vaginal microbiological research were carried out. Parenteral methylprednisolone 1 mg/kg/day was given as attack therapy for one week, and a dramatic cutaneous improvement was observed. The therapy was gradually decreased, in spite of the persistence of some oral lesions, reaching 0.3 mg/kg/day at the time of delivery 2 months later. In the 38th week, after the premature rupture of membranes, a 2,900 g healthy male fetus without cutaneous lesions was born by oxytocin-induced vaginal delivery; no lesions in the vaginal area were observed and the dermatosis did not worsen during puerperium. The patient did not breastfeed. After a 1-year follow-up the woman is still presenting oral pemphigus, which is under steroidal maintenance therapy.

DISCUSSION

The therapeutic management of pemphigus in pregnancy requires careful consideration before deciding on the use of corticosteroids. Experiences with high-dose and long-term therapies with corticosteroids in pregnant women with autoimmune diseases such as lupus erythematosus (5, 6), as well as with other diseases (7, 8), today make the use of corticosteroids in pregnancy reasonably safe. Only a small risk of teratogenic effects (cleft palate) and intrauterine growth retardation in human fetus is reported when high doses of corticosteroid are taken early in pregnancy (9). It is advisable to start steroidal therapy after the 12th week to avoid teratogenetic risks. Nevertheless, autoimmune diseases and their complications are more dangerous to mother and fetus than the use of corticosteroids at an appropriate dosage. Azathioprine, cyclophosphamide and methotrexate are also therapies for pemphigus, but their use is to be avoided due to their immunodepressive effects and teratogenicity, even if experiences with associated azathioprine and steroids in pregnant patients with renal transplants did not show teratogenic effects (10). Plasmapheresis is also limited to the treatment of pemphigus when resistant to high doses of corticosteroids (11).

Pemphigus in pregnancy is considered a disease with a high rate of stillbirth. In 1988, Ross et al. (4) reported one personal case with intrauterine fetal death and collected from literature 28 other cases of pemphigus in pregnancy (not all confirmed by immunofluorescence assay), 4 of which (14%) resulted in stillbirth. Goldberg et al. (3) in 1993 reported a case of successful birth in a woman with pemphigus vulgaris and referred, as unpublished observations, 7 pregnancies with a positive outcome. They also reviewed from literature 15 cases of pemphigus vulgaris, all confirmed by pathology and immunofluorescence assays, complicated by 4 stillbirths (27%).

Because of the high incidence of fetal loss, a strict obstetrical care and a close ultrasound follow-up are advisable. Frequent microbiological examinations of vagina and cervix should show any maternal infection caused by steroid-induced immunosup-

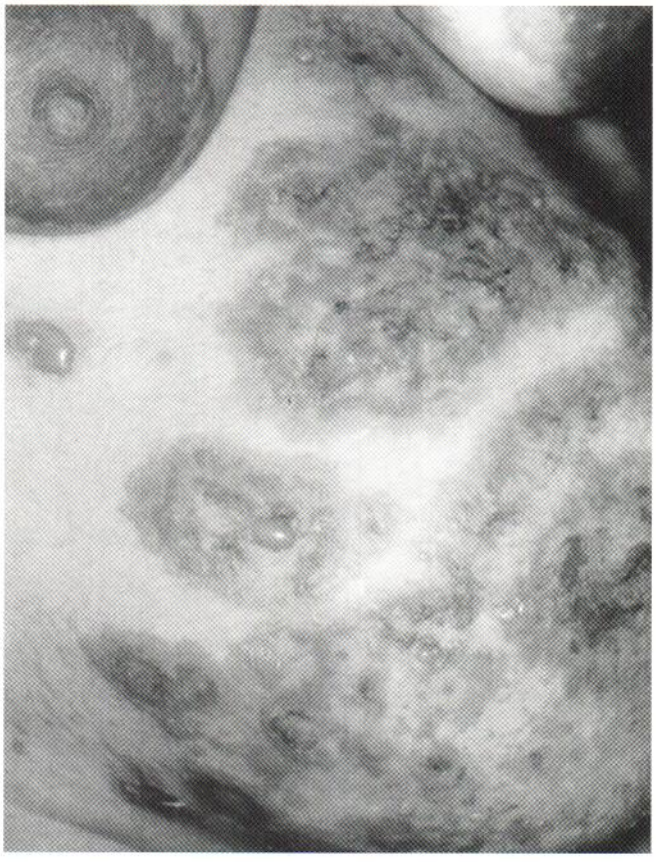

Fig. 1. Pemphigus in pregnancy: widespread bullous lesions arising on areas of erythema.

pression. In the absence of known advantages, an elective cesarean section is not advisable, although the presence of large vaginal erosions could contraindicate spontaneous delivery (3). In the case of a child with transmitted pemphigus, a complete clearing of blisters and erosions is expected to be attained within 2–3 weeks without therapy (3).

The successful outcome of the pregnancy of our patient leads us to believe that successful deliveries are less frequently reported than stillbirths or spontaneous abortion, as suggested by Goldberg et al. (3). Nevertheless, the data collected shows that pemphigus in pregnancy is still to be considered a disease with risk of stillbirth. The real incidence of fetal loss, however, could probably be re-evaluated if all deliveries were reported – positive as well as negative ones.

REFERENCES

1. Lynch P, Gallego RE, Saied NK. Pemphigus a review. Arizona Med 1976; 33: 1030–1037.
2. Samitz MH, Greenberg MS, Coletti JM. Pemphigus in association with pregnancy. Arch Dermatol 1953; 67: 10–17.
3. Goldberg NS, DeFeo C, Kirshenbaum N. Pemphigus vulgaris and pregnancy: risk factors and recommendations. J Am Acad Dermatol 1993; 28: 877–879.
4. Ross MG, Kane B, Frieder R, Gurevitch A, Hayashi R. Pemphigus in pregnancy: a reevaluation of fetal risk. Am J Obstet Gynecol 1986; 155: 30–33.
5. Syrop CH, Varner MW. Systemic lupus erythematosus. Clin Obstet Gynecol 1983; 26: 547–557.
6. Hyslett JP, Reece EA. Systemic lupus in pregnancy. Clin Perinatol 1985; 12: 539–550.
7. Lubbe WF, Liggins GC. Lupus anticoagulant and pregnancy. Am J Obstet Gynecol 1985; 153: 322–327.
8. Guerrini P, Vesce F, Colla F, Travagli S, Cocilovo G. Contribution to the assessment of steroid therapy in the prevention of respiratory distress syndrome in the neonate. Clin Exp Obst Gyn 1990; 3–4: 145–149.
9. Sidhu R. Corticosteroids in pregnancy. In: Hawkins DF, ed. Drugs and pregnancy – human teratogenesis and related problems. 2nd edn. Edinburgh: Churchill-Livingstone, 1987: 166–179.
10. Hawkins DF. Drug treatment of medical disorders in pregnancy. In: Hawkins DF, ed. Drugs and pregnancy – human teratogenesis and related problems. 2nd edn. Edinburgh: Churchill-Livingstone, 1987: 90–114.
11. Kanwar AJ, Kaur S. Pemphigus in pregnancy. Am J Obstet Gynecol 1990; 163: 1097.

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