***no patient handout*

Pemphigoid gestationis

Synopsis

Pemphigoid gestationis, also called herpes gestationis or gestational pemphigoid, is a rare, extremely pruritic vesiculobullous eruption that occurs during the third trimester of pregnancy or in the postpartum period. Patients typically present in the second or third trimester of pregnancy complaining of the abrupt onset of very pruritic urticarial papules and plaques, often within or adjacent to the umbilicus. This rapidly develops into generalized tense blisters, sparing the face, palms, soles, and mucous membranes.

Seventy-five percent of patients worsen dramatically at the time of delivery, and 25% present with de novo blisters in the postpartum period. Recurrence with future pregnancies is common, and disease may be more severe with each pregnancy; however, up to 5% of women will have no manifestation of the disease with the subsequent pregnancy. Recurrence with menstruation and with use of oral contraceptives is common.

Pemphigoid gestationis is characterized by autoantibodies against BP180 (BPAg2 or collagen XVII) and complement C3 deposition along the dermoepidermal junction on direct immunofluorescence. One theory of pathogenesis suggests that aberrant expression of paternal major histocompatibility complex class II antigens on the placenta initiates production of antibodies against placental basement membrane zone antigens, which then cross-react with skin. Virtually all patients with HG have anti-HLA antibodies, and nearly 50% have the HLA DR3 and DR4 haplotypes.

Pemphigoid gestationis is rare, occurring in 1 in 50 000 pregnancies. Since it is associated with HLA types DR3 and DR4, its occurrence in different populations is dependent on the frequency of those alleles.

Although there is no increase in maternal mortality, a 2009 study of 61 pregnancies complicated by pemphigoid gestationis found that onset in the first or second trimester and presence of blisters may lead to adverse pregnancy outcomes, including decreased gestational age at delivery and low-birth-weight children. Such pregnancies should be considered high-risk. Whether this results in increased infant mortality has been a matter of debate, but the most recent studies indicate that infants born to mothers with pemphigoid gestationis do not have increased rates of death. Systemic corticosteroid treatment does not substantially affect pregnancy outcomes.

Up to 10% of newborns will have bullous lesions secondary to placental transfer of antibodies.

Cases of similarly presenting disease have been reported in men with **choriocarcinoma** and women with **hydatidiform mole**, trophoblastic tumors, and choriocarcinoma.

Codes

ICD10CM:
O26.40 – Herpes gestationis, unspecified trimester

SNOMEDCT:
86081009 – Herpes gestationis

Look For

Abrupt-onset pruritic urticarial plaques on the abdomen, adjacent to or within the umbilicus, progressing to a generalized eruption of papules, vesicles, and tense bullae, typically sparing the face and mucous membranes.

Diagnostic Pearls

While polymorphous eruption of pregnancy (PEP) typically spares the umbilicus, pemphigoid gestationis plaques often form within or adjacent to the umbilicus.

Striae are not a site of predilection in pemphigoid gestationis, unlike PEP.

Differential Diagnosis & Pitfalls

- **Polymorphous eruption of pregnancy** (PEP) – may be distinguished with negative direct immunofluorescence (DIF) and NC16A ELISA
- **Allergic contact dermatitis**
- **Bullous drug eruption**
- **Urticaria**
- **Bullous pemphigoid**
- **Pemphigus vulgaris**
- **Erythema multiforme**
- **Stevens-Johnson syndrome**
- **Atopic eruption of pregnancy**

Best Tests

Biopsy reveals a subepidermal blister with perivascular lymphocytes and eosinophils. DIF reveals C3 in a linear band along the basement membrane zone, and salt split-skin shows deposition along the epidermal component, as in bullous pemphigoid.

Anti-BMZ antibody titers correlate with the extent and severity of disease if ELISA is used.

Peripheral eosinophilia may be present.

Management Pearls

Manage closely with the patient's obstetrician, who should be aware of the potential pregnancy outcomes, especially the increased risk associated with earlier onset disease.

Therapy

For localized cases, topical steroid preparations and oral antihistamines may be tried. Consult the patient's obstetrician prior to initiating. Topical corticosteroids are labeled as pregnancy category C. Begin with a high-potency topical corticosteroid, with a low-potency topical steroid for the folds (and the face, if involved):

High-potency topical corticosteroids (class 1-2):

- Fluocinonide cream, ointment – Apply every 12 hours (15, 30, 60, 120 g), or
- Desoximetasone cream, ointment – Apply every 12 hours (15, 60, 120 g), or
- Clobetasol cream, ointment – Apply every 12 hours (30, 45, 60 g), or
- Betamethasone dipropionate cream, ointment – Apply every 12 hours (15, 30, 45, 50 g)

Low-potency topical corticosteroid (class 6-7):

- Desonide cream, ointment – Apply every 12 hours (15, 60 g), or
- Hydrocortisone 2.5% cream, ointment – Apply every 12 hours (20, 28 g)

Diphenhydramine and chlorpheniramine are first-generation antihistamines that are considered safe to use during pregnancy (pregnancy category B). Nonsedating, second-generation antihistamines that are pregnancy category B include loratadine, cetirizine, and levocetirizine.

Systemic corticosteroid administration (prednisone at 0.5 mg/kg/day) is the cornerstone of therapy for more widespread or severe cases. Prednisone is pregnancy category C. Corticosteroids are often tapered after the disease is controlled, and patients may or may not remain on a suppressive dose. Systemic immunosuppressive therapies may be tried for recalcitrant cases that continue into the postpartum period.

The disease does not cause long-term harm to the patient, although the pruritus may be significant.