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Dermatoses of Pregnancy

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The author reports no conflict of interest.

Condition	Clinical Features and Associations	Management	Other Features
Atopic eruption of pregnancy (eczema of pregnancy)	Pruritus presenting with prurigo-type lesions on the trunk, arms, and legs; onset before the third trimester; 20% of patients may have exacerbation of preexisting atopic dermatitis, but 80% experience skin manifestations for the first time during pregnancy	Topical steroids and emollients	Increase in T_H2-dominant humoral immune response
Cholestasis of pregnancy (jaundice of pregnancy, prurigo gravidarum, obstetric cholestasis, intrahepatic cholestasis of pregnancy)	Generalized pruritus is a prominent feature, no primary lesions, jaundice in 20% of cases; onset in the third trimester of pregnancy, usually resolves 1–2 d after delivery; associated with multiple gestations, underlying genetic predisposition, increased risk for cholelithiasis or gallbladder disease	First-line treatment is ursodeoxycholic acid, cholestyramine or phenobarbital for modest elevation of bile acids, UVB phototherapy, oral guar gum, and vitamin K if deficient; rest and low-fat diet	Degree of fetal risk is controversial; meconium staining and premature labor in 45% of cases; fetal distress, stillbirths, mortality as high as 13%; recurrence in subsequent pregnancies and with use of oral contraceptives; elevation of serum bile acid levels
Gestational pemphigoid (pemphigoid gestationis, herpes gestationis)	Urticarial papules and plaques in the periumbilical region that progress to a generalized pemphigoidlike eruption; rarely involves mucous membranes; typically develops during the second or third trimester or immediately postpartum; spontaneous remission over weeks to months following delivery usually is seen; associated findings include severe pruritus, hydatidiform moles and choriocarcinomas, recurrence with menses and use of oral contraceptives, autoimmune diseases such as Graves disease; neonates are affected in 10% of cases; increased incidence of preterm delivery and SGA neonates; flares with delivery in up to 75% of patients; not present in each pregnancy in 5%	Systemic corticosteroids are the mainstay of treatment (eg, prednisone 0.5 mg/kg/d), topical corticosteroids and antihistamines usually are ineffective; no known clinical trials have been completed	Subepidermal vesicles and perivascular infiltrate of lymphocytes and eosinophils, showing identical histopathologic findings to BP; antibodies (C3 and IgG) on the epidermal side on IIF salt-split skin; antibodies to BPAg2 (collagen XVII); increased frequency of HLA-DR3 and HLA-DR4; serum eosinophilia

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Condition	Clinical Features and Associations	Management	Other Features
Impetigo gestationis (pustular psoriasis of pregnancy)	Rare disease; not pruritic, erythematous plaques with rings of pustules; plaques enlarge from the periphery as the center becomes eroded and crusted; lesions first manifest in intertriginous areas; trunk, arms, and legs are affected while hands, feet, and face usually are spared; onycholysis and pitting; can occur anytime during pregnancy and remits in the postpartum period; hormonal changes (progesterone), hypocalcemia, and hypoparathyroidism may be inciting factors	Systemic corticosteroids (eg, prednisolone 60–80 mg/d, low-dose cyclosporine (2–3 mg/kg/d) may help patients who fail to respond to oral corticosteroids	Placental insufficiency, fetal growth restriction, stillbirth; pathology is the same as pustular psoriasis in nonpregnant patients
Prurigo of pregnancy (prurigo gestationis, Besnier prurigo, Nurse early-onset prurigo of pregnancy, Spangler papular dermatitis of pregnancy	Pruritus presenting with discrete excoriated papules on the extensor surfaces of the arms, legs, and abdomen; pustules or follicular pustules may be seen; reported in all trimesters of pregnancy; disease may last for weeks to months postpartum; may be associated with atopic dermatitis; possible overlap with cholestasis of pregnancy	Topical corticosteroids, benzoyl peroxide, UVB light therapy	Recurrence during subsequent pregnancies; elevation in serum IgE levels; no fetal risk
Pruritic urticarial papules and plaques of pregnancy (PUPPP) (polymorphic eruption of pregnancy, toxic erythema of pregnancy)	Most common pregnancy-related dermatosis; pruritic urticarial papules classically located within the abdominal striae with periumbilical sparing; can spread in days, usually sparing the face, palms, and soles; onset usually is in primigravidas in the latter part of the third trimester or immediately postpartum; resolution generally occurs within 7–10 d of delivery; associated with increased maternal weight gain; increased incidence in multiple gestation pregnancies; diagnosis of exclusion; liver function panel, serum hCG, and cortisol levels generally are normal	Potent topical corticosteroids, oral antihistamines, and systemic corticosteroids	Typically does not recur with subsequent pregnancies, no fetal risk, DIF is negative

Abbreviations: T_H2, helper T cell type 2; SGA, small for gestational age; BP, bullous pemphigoid; IIF, indirect immunofluorescence; BPAg2, bullous pemphigoid antigen 2; hCG, human chorionic gonadotropin; DIF, direct immunofluorescence.

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Practice Questions

1. **Which dermatosis of pregnancy occurs during the third trimester and is associated with multiple gestation pregnancies?**
   a. atopic eruption of pregnancy
   b. gestational pemphigoid
   c. intrahepatic cholestasis of pregnancy
   d. prurigo of pregnancy
   e. pruritic urticarial papules and plaques of pregnancy

2. **Which dermatosis of pregnancy frequently flares after delivery?**
   a. atopic eruption of pregnancy
   b. gestational pemphigoid
   c. polymorphic eruption of pregnancy
   d. prurigo gravidarum
   e. prurigo of pregnancy

3. **Which dermatosis of pregnancy has lesions that have a predilection for the abdominal striae?**
   a. cholestasis of pregnancy
   b. gestational pemphigoid
   c. prurigo gestationis
   d. prurigo of pregnancy
   e. pruritic urticarial papules and plaques of pregnancy

4. **Which dermatosis of pregnancy has a risk for the development of hydatidiform moles and choriocarcinomas?**
   a. atopic eruption of pregnancy
   b. cholestasis of pregnancy
   c. gestational pemphigoid
   d. pruritic urticarial papules and plaques of pregnancy
   e. toxic erythema of pregnancy

5. **Intrahepatic cholestasis of pregnancy has been associated with:**
   a. fetal mortality as high as 13%
   b. jaundice in 20% of cases
   c. onset in the third trimester of pregnancy
   d. recurrence in subsequent pregnancies
   e. all of the above

Fact sheets and practice questions will be posted monthly. Answers are posted separately on www.cutis.com.

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