



Skin Problems in Pregnancy

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Pregnancy is a time of major endocrine, metabolic and immunological changes. Effects on the skin can be categorized as (1) "normal" or physiological skin changes; (Table 1) (2) modification of existing skin disease; and (3) skin conditions exclusive to pregnancy (pregnancy dermatoses, Table 2).

Table 1. Effects of pregnancy on normal skin, hair and nails

- Pigmentation: hyperpigmentation, melasma
- Hair: hypertrichosis, postpartum telogen effluvium
- Increased eccrine activity
- Reduced apocrine activity
- Abdominal striae
- Vascular changes: spider telangiectasia, palmar erythema

PRURITUS GRAVIDARUM

Severe, troublesome itching can occur on normal skin. This may represent a mild variant of cholestasis of pregnancy, but with normal liver function tests. Bath oils and emollients may help.

EXISTING SKIN DISORDERS IN PREGNANCY

Acne

Increased sebaceous gland activity may worsen acne. Tetracyclines, cyproterone acetate, isotretinoin and topical retinoids are contraindicated in pregnancy. However, topical antibiotics, benzoyl peroxide and oral erythromycin can be used.

Atopic Eczema

Atopic eczema may improve, but can be exacerbated by excoriation caused by pruritus of pregnancy. Nipple eczema can complicate breastfeeding. A moderately potent topical corticosteroid and antihistamine (preferably chlorpheniramine) can be used. Topical tacrolimus is contraindicated.

Table 2. Pregnancy dermatoses

		Stage of pregnancy	Clinical features	Recurrence?	Autoantibodies
Pemphigoid gestationis	Rare	Second trimester onwards	Urticated erythema, bullae	Yes, usually worse	Present
Polymorphic eruption of pregnancy	1/200	Late pregnancy	Itchy papules in striae	Unlikely	Absent
Prurigo of pregnancy	1/300	Third trimester	Itchy papules on abdomen and limbs	Likely	Absent
Pruritic folliculitis		Second trimester	Itchy "corticosteroid-induced acne"		Absent

Figure 1. Early prebullous lesions on the abdomen in pemphigoid gestationis.



Psoriasis

Psoriasis generally improves, but can flare postpartum. Occasionally, a sudden eruption of acute pustular psoriasis occurs. Management of severe psoriasis is often difficult during pregnancy, because retinoids, methotrexate and psoralen plus UVA are contraindicated and vitamin D analogues discouraged. However, topical corticosteroids, dithranol and UVB can be used.

Infections

Reduced cell-mediated immunity means that *Candida*, viral warts and herpes simplex virus infections are

more common in pregnancy and more severe, and can be transmitted to the baby during childbirth. Podophyllin is contraindicated for the treatment of viral warts in pregnancy. Cryotherapy is preferable, though imiquimod can be used with caution.

PREGNANCY DERMATOSES

Pemphigoid Gestationis

Pemphigoid gestationis (herpes gestationis) is a rare (1/60,000 pregnancies) autoimmune bullous dermatosis. Intensely itchy, urticated lesions develop initially in the periumbilical region, (Figure 1) then rapidly progress to widespread blisters. The condition usually occurs in the second or third trimester, or immediately postpartum. It is also associated with hydatidiform mole and choriocarcinoma. It tends not to affect first pregnancies. Some newborns of mothers with pemphigoid gestationis develop blisters through placental antibody transfer. The condition may lead to premature or low birth weight babies.

Skin biopsy reveals a subepithelial blister. Direct immunofluorescence shows IgG and complement deposition along the basement membrane zone.

In mild or early cases, topical corticosteroids and antihistamines are helpful, but the vesicobullous phase usually requires oral corticosteroids, sometimes in high doses.

Pemphigoid gestationis can improve towards term, with subsequent relapse after delivery. The prognosis is generally good and remission usually occurs within about 9 months. However, the condition often recurs in subsequent pregnancies, with increasing severity and earlier presentation of disease.

Polymorphic Eruption of Pregnancy

Polymorphic eruption of pregnancy (pruritic urticarial papules and plaques of pregnancy) is a common dermatosis (1/200 pregnancies). It mainly occurs in the last trimester of first pregnancies, but can occur in the early postpartum period. Itchy urticarial papules and plaques arise from abdominal striae, (Figure 2) typically sparing the periumbilical area. Abdominal distension is thought to be the triggering factor, which may explain the higher incidence in multiple pregnancies. Polymorphic eruption of pregnancy is not a threat to the fetus and can be distinguished from pemphigoid gestationis by a negative direct immunofluorescence test.

The condition typically resolves within 2 weeks of delivery and is unlikely to recur in future pregnancies. Symptomatic relief can be achieved with moderately potent topical corticosteroids and antihistamines. Occasionally, oral corticosteroids or induction of labour is required.

Prurigo of Pregnancy

Prurigo of pregnancy occurs in 1/300 pregnancies. It is characterized by itchy papules on the abdomen and extensor surfaces. It usually arises during the third trimester and persists postpartum. No urticarial lesions or bullae are seen. Women with pre-existing atopy are prone to this condition. No damage to the fetus has been reported; therefore, symptomatic treatment only is required. The condition can recur in subsequent pregnancies.

Pruritic Folliculitis of Pregnancy

Pruritic folliculitis of pregnancy is less common. It

Figure 2. Polymorphic eruption of pregnancy – urticated papules in abdominal striae.



Practice Points

- “Normal” skin changes in pregnancy may cause distressing symptoms and anxiety.
- Pregnancy can affect existing skin disease in an unpredictable manner.
- It is important to recognize pemphigoid gestationis, because it may affect fetal outcome; systemic medication may be required.
- Skin biopsy for direct immunofluorescence is useful in differentiating the pregnancy dermatoses.

presents in the second trimester with grouped pruritic follicular papules, similar to corticosteroid-induced acne. It may be androgen-dependent. The condition usually responds to mild topical corticosteroids and benzoyl peroxide.

FURTHER READING

1. Holmes RC, Black MM. The specific dermatoses of pregnancy. *J Am Acad Dermatol* 1983;8:405-412.
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