Skin Conditions (Rash and Itch) in Pregnancy

Disclaimer

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Red Flags

- Cholestasis of pregnancy
- Pemphigoid gestationis
- Pustular psoriasis

Background – About Skin Conditions (Rash and Itch) in Pregnancy

- Skin changes in pregnancy, due to hormones, are common.
- Pregnancy may result in an increase in prevalence or severity of some common skin problems, e.g. acne, eczema, psoriasis.
- The main pregnancy specific dermatoses include:
  - Pruritic urticarial papules and plaques of pregnancy (PUPPP)
  - Pemphigoid gestationis (PG)
  - Cholestasis of pregnancy
  - Atopic eruption of pregnancy
  - Cholestasis of pregnancy and pemphigoid gestationis can cause adverse fetal outcomes and require increased fetal monitoring

Assessment

1. Take a patient history. Include:
   - medical (liver disease, prior cholestasis)
   - family and current living conditions
   - obstetric
   - current illnesses, medications, associated itch, nausea, symptoms of cholestasis including jaundice, pale stool, dark urine.

2. Physical examination focusing on the distribution and morphology of the lesions. Be aware of the *common physiological changes* that can occur to hair, nails, and skin in pregnancy.

*Common physiological skin changes in pregnancy*

- Darkening of areola, nipple and genital skin
- Linear pigmentation (dark line on lower abdomen)
- Palmar erythema
- Skin tags
- Striae gravidarum (stretch marks)
- Telangiectasia
- Telogen effluvium (hair loss after baby is born)
- Vascular lesions e.g. pyogenic granulomas, haemangiomas

*Note: pre-existing naevi may darken or enlarge (if on abdomen, breast), but if non-homogenous or other concerning features, should be biopsied as usual (lignocaine without adrenaline (Cat A)).*
3. Assess for benign conditions with a rash:
   ➢ **Pruritic urticarial papules and plaques of pregnancy (PUPPP)**
     • Common (1 in 160 pregnancies)
     • Usually occurs in:
       o first pregnancy and tends not to recur in subsequent pregnancies
       o latter part of third trimester or immediately postpartum
     • Small, pink papules and plaques that appear in abdominal striae with umbilical sparing
     • Spreads to limbs but tends to spare face, palms, soles.
     • Can be polymorphic (urticarial, targets, tiny vesicles), no true blisters
     • Resolves after about 4 weeks
     • No concerns for fetal or maternal health

   See [DermNet NZ – PUPPP](https://www.dermnetnz.org) for more information and pictures.

   ➢ **Atopic eruption of pregnancy (prurigo of pregnancy)**
     • Grouped pruritic papules or nodules usually on the limbs
     • May be more common in patient with an atopic history
     • Usually occurs in 2nd or 3rd Trimester but can develop in all stages of pregnancy
     • Usually resolves post delivery but can take weeks to months post-partum
     • See [DermNet NZ – Prurigo of Pregnancy](https://www.dermnetnz.org).

4. Potentially serious conditions with a rash:
   ➢ **Pemphigoid gestationis (PG)** – a rare, blistering disease which can cause adverse fetal outcomes (prematurity and intrauterine growth restriction). Requires a **skin biopsy** to confirm diagnosis.

   **Skin biopsy**
   • Take one biopsy at the edge of a blister and send in formalin for histology.
   • Take a second biopsy of normal skin near a blister and send fresh for direct immunofluorescence.

   **Pemphigoid gestationis (PG)**
   • A rare pregnancy-associated autoimmune skin disease that is characterised by abrupt onset of an itchy, hive-like rash that develops into blisters.
   • Commences within or near umbilicus and spreads all over body (spares mucous membranes).
   • Usually see clustered vesicles (‘herpes like’) or tense bullae.
   • It is most common during the second and third trimesters of pregnancy and likely to recur with subsequent pregnancies.
   • A small proportion of neonates (10%) get transient symptoms with blistering from maternal antibodies
   • May flare with menstruation or oral contraceptive pill.
   • Patients with pemphigoid gestationis are at risk of Grave’s Disease.

   ➢ **Pustular psoriasis**
   • Generalised pustular psoriasis is a rare and serious skin disorder that presents with flares of widespread sterile pustules on a background of red scaly psoriasis-like plaques.
   • It may present in pregnancy.
   • It may involve systemic symptoms such as fever, chills, headache, tachycardia, anorexia, nausea, and muscle weakness.
• May be associated with hypocalcaemia.

5. Itch/pruritus in the absence of a rash:
   - **Cholestasis of pregnancy (intrahepatic cholestasis)** usually presents with intense, persistent itch with possible nocturnal exacerbation, especially in hands and feet, in the absence of a skin rash (may see excoriations, nodules from chronic scratching).

   **Cholestasis of pregnancy (intrahepatic cholestasis)**
   *Itch in the absence of rash may represent cholestasis, thought to be due to accumulation of bile acids. It is a diagnosis of exclusion.*
   - Usually presents in 2nd or 3rd trimester
   - Can cause jaundice, steatorrhea and vitamin K deficiency
   - Increased risk if positive family history
   - Significant risk of premature birth, fetal distress, stillbirth (if bile acids ≥100 micromole/L)
   - Itch resolves spontaneously days after birth
   - Treatment involves ursodeoxycholic acid, close fetal monitoring and possible early induction of labour
   - Can recur with subsequent pregnancy and oral contraceptive pill
     - If suspected, arrange urgent LFT and bile acids.
     - If normal results and persisting itch, repeat levels weekly as itch can precede rash by 1 to 2 weeks.

   ➢ Pruritus gravidarum is itch in pregnancy without any alternative cause. It occurs in approximately 23% of pregnancies and is a diagnosis of exclusion.

   **Alternative causes of itch in pregnancy**
   *(Not an exclusive list)*
   - Pregnancy specific:
     - Cholestasis of pregnancy
     - Atopic eruption of pregnancy (prurigo of pregnancy)
     - Pruritic urticarial papules and plaques of pregnancy (PUPPP)
     - Pemphigoid gestationis (PG)
   - Non-pregnancy specific:
     - Scabies
     - Eczema
     - Contact dermatitis
     - Urticaria
     - Viral exanthem
     - Drug Eruption

### Management

1. Refer for immediate obstetric review if suspected:
   - cholestasis of pregnancy (bile acids >10 micromoles/L or LFT are abnormal) [SNZ: moved details from Ax]
   - pemphigoid gestationis
2. If generalised pustular psoriasis or suspected pemphigoid gestationis, refer for immediate dermatology review.

3. If a pregnant patient presents with any other pustular or vesiculobullous eruption where cholestasis of pregnancy, pemphigoid gestationis, or pustular psoriasis is not the suspected pathology, seek urgent dermatology advice (on call registrar or private specialist).

4. General treatment for rash and/or pruritic conditions in pregnancy (e.g. PUPP, eczema, atopic eruption of pregnancy) includes:
   - **emollients**
   - **topical corticosteroids**

   **Topical corticosteroids**
   Generally considered safe in pregnancy. Hydrocortisone cream/ointment and betamethasone dipropionate cream/ointment are Category A. Check TGA – Prescribing Medicines In Pregnancy Database for specific information.

   - **oral antihistamines**

   **Oral antihistamines**
   Oral antihistamines are generally considered safe in pregnancy. Check TGA – Prescribing Medicines In Pregnancy Database for specific information.

   - **systemic corticosteroids** in severe cases.

   **Systemic corticosteroid**
   If required, prescribe short courses of low dose prednisolone.
   If in first trimester, seek obstetric advice due to possible increase risk of cleft palate.

5. See DermNet NZ – Skin Problems in Pregnancy for complete management of PUPPP, prurigo of pregnancy, and exacerbations of common skin conditions in pregnancy.

6. If not resolving, consider referral for dermatology or obstetric opinion.

7. If unsure of diagnosis, consider a skin biopsy or refer for dermatology or obstetric opinion.

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**Referral**

- Refer for immediate obstetric review if suspected:
  - cholestasis of pregnancy (bile acids >10 micromoles/L or LFT are abnormal).
  - pemphigoid gestationis.

- If generalised pustular psoriasis or suspected pemphigoid gestationis, refer for immediate dermatology review.

- If a pregnant patient presents with any other pustular or vesiculobullous eruption, seek urgent dermatology advice (on call registrar or private specialist).

- Refer for dermatology or obstetric opinion if:
  - rash not resolving.
  - unsure of diagnosis.
Information

For health professionals

Further information

- DermNet NZ – Skin Problems in Pregnancy
- ICP Care – Overview of Intrahepatic Cholestasis of Pregnancy (ICP)

For patients

- ICP Care – Severe Itching During Pregnancy?
- Monash Women’s – Cholestasis of Pregnancy

References

Select bibliography


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Last updated: June 2020