

# DERMATOLOGIC PROBLEMS OF PREGNANCY

Week 45

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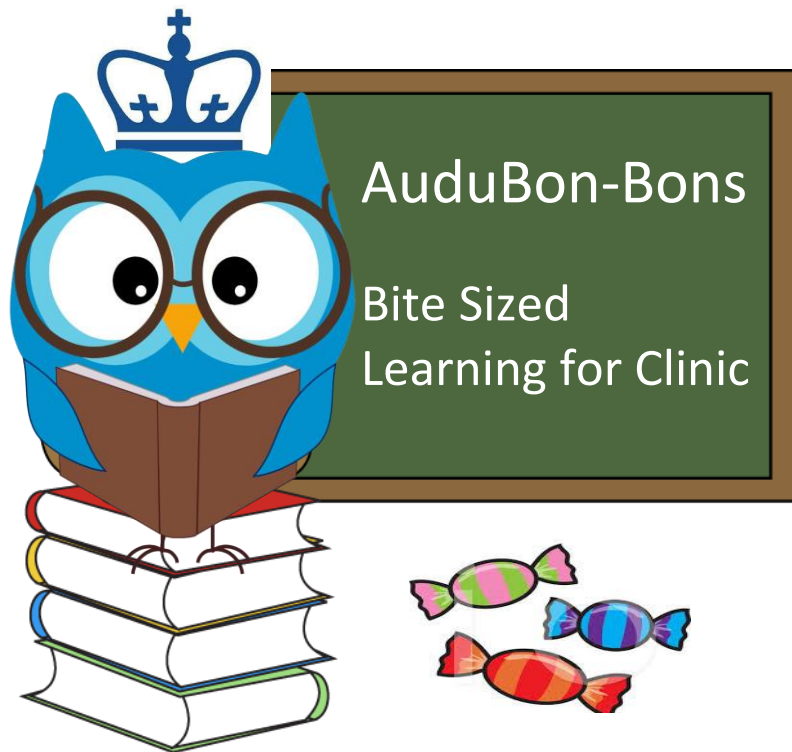
with SDH and .phrase slides by: Chloé Altchek, MS4

Reading Assignment:

Parish, L, Parish, J, *Global Library of Women's Med.*,

(ISSN: 1756-2228) 2011; DOI  
10.3843/GLOWM.10114

([https://www.glowm.com/section\\_view/heading/Dermatologic%20Diseases%20in%20Pregnancy/item/114](https://www.glowm.com/section_view/heading/Dermatologic%20Diseases%20in%20Pregnancy/item/114))



# LEARNING OBJECTIVES



- To recognize the most common dermatologic problems of pregnancy
- To understand basic incidence, pathogenesis, treatment, and maternal/fetal impact of the most common dermatologic problems of pregnancy



# CASE VIGNETTE

You are staffing the Audubon Clinic and the MA informs you that you have several patients in the waiting room concerned about dermatologic findings.



# Patient #1

A 30 yo G1P0 woman at 32 weeks EGA presents with concern about a new skin finding on her abdomen:

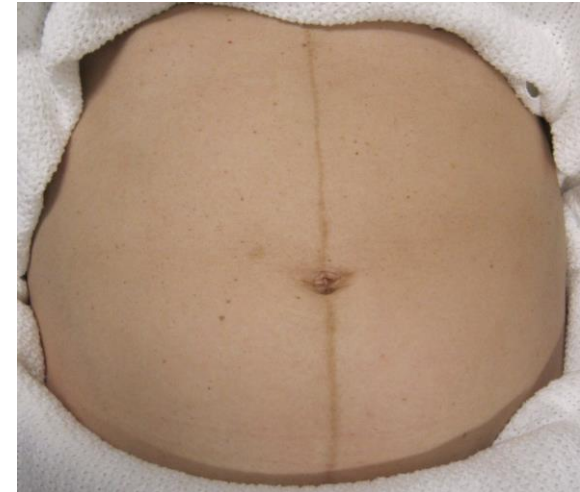


# Patient #1

**What is her dermatologic finding?**

**Linea nigra**

- **Incidence:**
  - 75% of pregnant women<sup>1</sup>
- **Pathophysiology:**
  - Increased melanocyte-stimulating hormone made by the placenta
- **Prevention:**
  - Sunscreen, sun avoidance
- **Treatment:**
  - Typically resolves within a few months of delivery



## Patient #2

A 24 yo G1P0 woman at 18+4 weeks EGA presents with concern about a new skin finding on her face:



# Patient #2

## What is her dermatologic finding?

### Melasma

- also known as chloasma or mask of pregnancy

- **Incidence:**
  - Occurs in up to 75% of pregnant women<sup>2</sup>
- **Pathophysiology:**
  - Increased melanocyte-stimulating hormone made by the placenta
- **Prevention:**
  - Sunscreen, sun avoidance
- **Treatment:**
  - Usually regresses within 1 year<sup>3</sup>
  - With persistent melasma, topical therapy with hydroquinone/retinoids, chemical peel



<https://www.verywellhealth.com/melasma-overview-4588702>

# Patient #3

A 28 yo G1P0 woman at 11+3 weeks EGA presents with concern about a new skin finding on her face:





# Patient #3

What is her dermatologic finding?

## Spider angioma

- **Incidence:**
  - Between 11-66% of pregnant women<sup>4</sup>
  - Most frequently appear in months 2-5 of pregnancy
- **Pathophysiology:**
  - Estrogen excess
- **Treatment:**
  - 90% regress by three months postpartum<sup>4</sup>
  - Persistent spider angioma can be treated with laser therapy



# Patient #4

A 23 yo G1P0 woman at 9+1 weeks EGA presents with concern about a new skin finding on her hands:



<https://www.healthline.com/health/skin-disorders/palmar-erythema#picture>

# Patient #4

**What is her dermatologic finding?**

## Palmar erythema

- **Incidence:**
  - Between 33% - 66% of pregnant women<sup>4</sup>
- **Pathophysiology:**
  - Estrogen excess
- **Treatment:**
  - Typically resolves after delivery



# Patient #5

A 34 yo G3P1 woman at 30+3 weeks EGA presents with concern about a new finding on her lower legs:



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# Patient #5

**What is her dermatologic finding?**

**Varicose veins**

- **Pathophysiology:**
  - Saphenous, vulvar, and hemorrhoidal varicosities all occur at an increased rate during pregnancy due to increased blood flow and venous pressure in femoral/pelvic vessels from enlarging uterus
  - Genetic predisposition
- **Treatment:**
  - Supportive therapy with leg elevation, compression hosiery, sleeping on left side, exercise, avoidance of long periods of standing/sitting
  - Can consider postpartum medical or surgical intervention

## Patient #6

A 37 yo G1P0 woman at 37+3 weeks EGA presents with concern about a new skin finding on her abdomen. The rash is itchy and bumpy.



# Patient #6

## What is her dermatologic finding?

### Polymorphic eruption of pregnancy (PEP)

– also known as pruritic urticarial papules and plaques of pregnancy (PUPPP)

- **Incidence:**

- 1:160 – 1:300 pregnancies<sup>5</sup>
- 3/4 of PEP patients are nulliparous<sup>6</sup>

- **Disease Course:**

- Usually presents in third trimester or immediately postpartum<sup>6</sup>
- Initially presents with pruritic, erythematous papules within the abdominal striae with periumbilical sparing. Progresses to trunks and extremities, sparing the palms, soles, and face
- Resolves within 4-6 weeks of onset<sup>7</sup>
- No impact on maternal or fetal outcomes<sup>5</sup>
- Rarely reoccurs in subsequent pregnancies<sup>6</sup>

- **Pathogenesis:**

- Unknown – the degree of stretching of the abdominal skin may play a role<sup>8</sup>

- **Diagnosis:**

- Clinical

- **Treatment:**

- Symptomatic – topical corticosteroids and antihistamines



<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5418956/>

# Patient #7

A 19 yo G1P0 woman at 17+2 weeks EGA presents with concern about a new skin finding on her abdomen. The rash is itchy with tense blisters



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# Patient #7

## What is her dermatologic finding?

### Pemphigoid gestationis (herpes gestationis)

- **Incidence:**
  - 1 in 20,000 – 50,000 pregnancies<sup>9</sup>
- **Disease Course:**
  - Most commonly occurs in second/third trimester
  - Appears around umbilicus as urticarial papules/plaques which join to form tense blisters. Extends to involve the trunk, extremities, palms, and soles with mucosal sparing
  - Usually reoccur with subsequent pregnancies, OCPs, or during menstruation<sup>10</sup>
  - Associated with increased fetal risk
    - A review of 61 pregnancies complicated by pemphigoid gestationis reported 34% preterm births and 34% small for gestational age<sup>11</sup>
- **Pathogenesis:**
  - Autoimmune, primary site likely the placenta
  - Association with HLA-DR3/HLA-DR4<sup>10</sup>
- **Diagnosis:**
  - Clinical + biopsy
- **Treatment:**
  - High-potency topical corticosteroids, systemic corticosteroids

# Patient #8

A 23 yo G3P2 woman at 30+1 weeks EGA presents with concern about a new skin finding on her arms and face: dry skin and itchy red bumps



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Maharajan, Ajaya, et al. "Skin eruptions specific to pregnancy: an overview." *The Obstetrician & Gynaecologist* 15.4 (2013): 233-240.

# Patient #8

## What is her dermatologic finding?

### Atopic eruption of pregnancy

(a unifying term that includes eczema in pregnancy, prurigo of pregnancy, and pruritic folliculitis of pregnancy)

- **Incidence:**
  - 1 in 300
  - Higher incidence in women with a family history of atopy<sup>12</sup>
- **Disease Course:**
  - Often begins during the first or second trimester
  - Presents with erythematous, excoriated nodules/papules on the face, neck, chest and extensor surfaces of limbs and trunks
  - Improvement seen following delivery with no postnatal exacerbation
  - No adverse maternal or fetal outcomes<sup>12</sup>
  - Tends to recur in subsequent pregnancies<sup>7</sup>
- **Diagnosis:**
  - Clinical
- **Pathogenesis:**
  - Unknown – thought to be triggered by immunologic changes associated with pregnancy
- **Treatment:**
  - Symptomatic – emollient use, topical corticosteroids, antihistamines

# TAKE HOME POINTS

- **Linea nigra** and **melasma** are benign hyperpigmentation conditions that occur in the majority of pregnant women due to increased melanocyte stimulating hormone and generally resolve spontaneously after delivery
- **Spider angioma** and **palmar erythema** are benign conditions with varied incidence in pregnant women due to estrogen excess and typically resolve spontaneously after delivery
- **Saphenous, vulvar, and hemorrhoidal varicosities** occur at an increased rate during pregnancy due to increased blood flow and venous pressure and are treated with supportive therapy
- **PEP** occurs in ~1:200 pregnancies, is treated symptomatically, has no impact on maternal/fetal wellbeing, and rarely recurs in subsequent pregnancies
- **Pemphigoid gestationis** occurs in ~1:35000 pregnancies, is treated with corticosteroids, is associated with increased fetal risk, and may reoccur in subsequent pregnancies
- **Atopic eruption of pregnancy** occurs in 1:300 pregnancies, is treated symptomatically, has no impact on maternal/fetal wellbeing, and may reoccur in subsequent pregnancies

# SOCIAL DETERMINANTS OF HEALTH

Certain dermatoses that present during pregnancy have a predilection for populations with skin of color (SOC).



Melasma (chloasma) is the most cosmetically disturbing form of hyperpigmentation and is most common in women of black, Hispanic, or Asian descent. The pigmentary change may be more noticeable in the SOC population.

<https://inoya-laboratoire.com>

Counsel patients on sun protection!



Striae gravidarum is more common in women with black, Hispanic, or Asian ethnicities

<https://obgyn.onlinelibrary.wiley.com/doi/abs/10.1016/j.ijgo.2009.08.008>

Risks can be reduced with careful surgical techniques and wound care.

- Bilayered closures of trunk and extremities with subcuticular running polyglactin 910 suture left in place also has a better appearance than simple running epidermal closures



Hypertrophic scars and keloids are particularly common in patients of black, Hispanic, or Asian descent. There may be a genetic predisposition in these populations that leads to excessive fibroblast proliferation and collagen synthesis during wound healing

<https://keloidresearch.com>

# EPIC .PHRASE

## **.BBonPemphigoidGestationis**

Description: Pemphigoid Gestationis workup, treatment and counseling

The patient was advised that symptoms may be consistent with diagnosis of pemphigoid gestationis. Education on the associated risks was provided including increased fetal risk and likely reoccurrence with subsequent pregnancies, OCPs, or during menstruation. \*\*\*Further evaluation with biopsy was initiated. Treatment options upon confirmation of diagnosis with biopsy results were agreed upon including high-potency topical corticosteroids and/or systemic corticosteroids with plan to decrease to minimum level that controls occurrence of the blistering eruption. Possible treatment of the skin erosions with topical antibiotics to prevent secondary infection was also discussed.

## **.BBonMelasma**

Description: Melasma education and counseling

Education and preventative counseling regarding the diagnosis of melasma was discussed including avoidance of sun with sunscreen and sun protection. The patient was advised that it usually regresses within 1 year however if it persists, treatment with topical hydroquinone/retinoids or chemical peel is available.

## **.BBonVaricoseVeins**

Description: Varicose veins education and counseling

The diagnosis of varicose veins was discussed with the patient. Options for supportive therapy were outlined including leg elevation, compression hosiery, sleeping on left side, exercise, avoidance of long periods of standing/sitting. If persistent, patient was advised that postpartum medical or surgical interventions are available.



# CODING/BILLING

## ICD-10 Codes:

- PEP: O26. 86
- Pemphigoid gestationis: O26.41, O26.42
- Varicose veins: I83.813
- Melasma: L81.1
- Other erythematous condition: L53.8



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