The Maternal Canvas: Navigating The Dermatological Landscape of Pregnancy

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Pregnancy Dermatoses: A Puzzle Within a Physiological Storm

- Pregnancy transforms nearly every organ system- **the skin is no exception.**

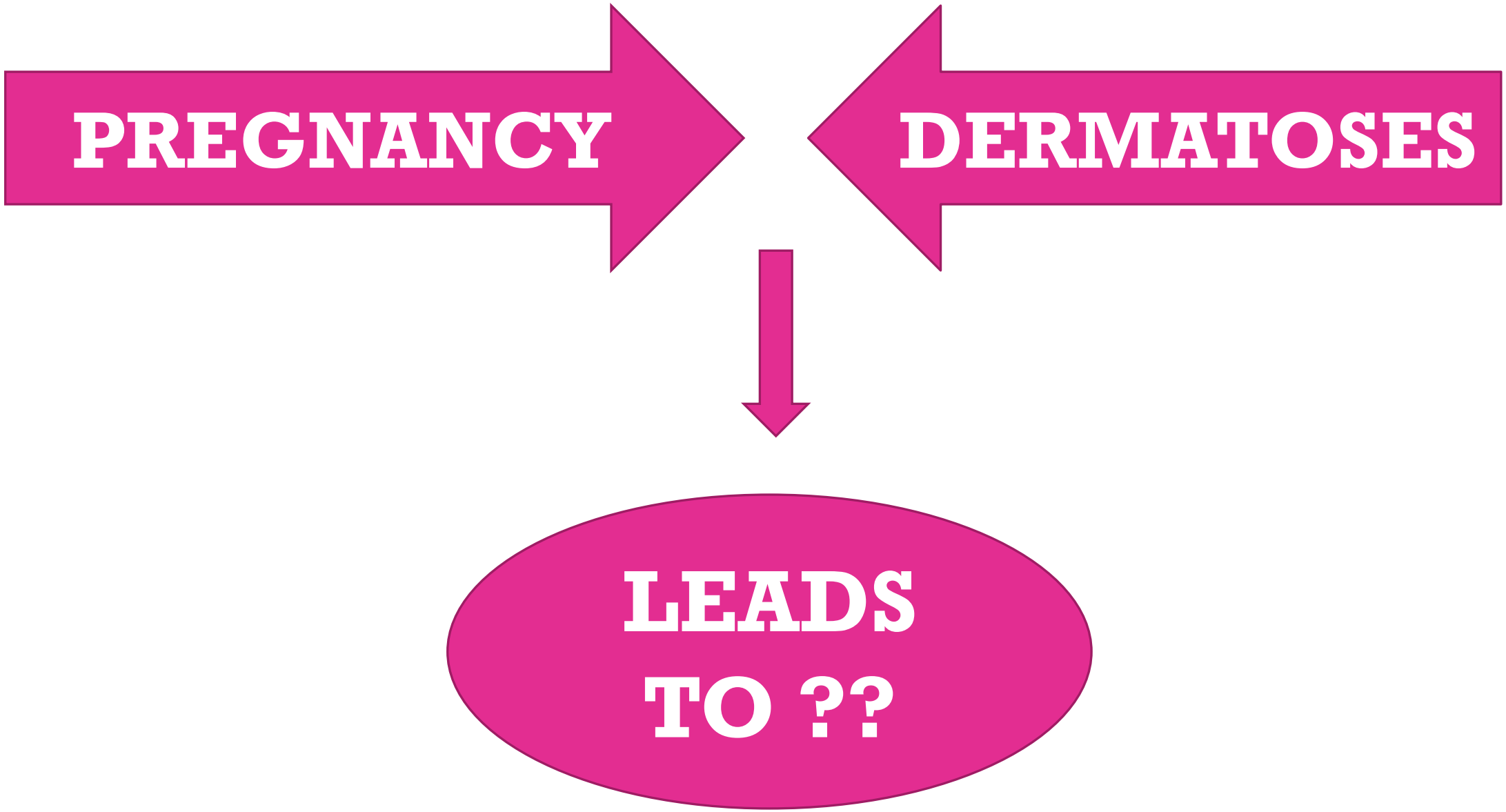
- But when do these changes cross the line from **physiological to pathological?**

- Why do some women develop **intense pruritus, blistering eruptions, or widespread rashes?**

- The immune system shifts --> Hormones surge --> Metabolism rewires itself.
- **Amid these storms, the skin becomes a canvas of clues**.
- But which clues signal **danger,** and which are simply **noise?**

- Some eruptions cause only discomfort, while others may lead to **complications.**

- Recognizing patterns early is a clinician's **critical diagnostic puzzle.**


PREGNANCY
DERMATOSES
LEADS
TO ??

Dermatoses in pregnancy

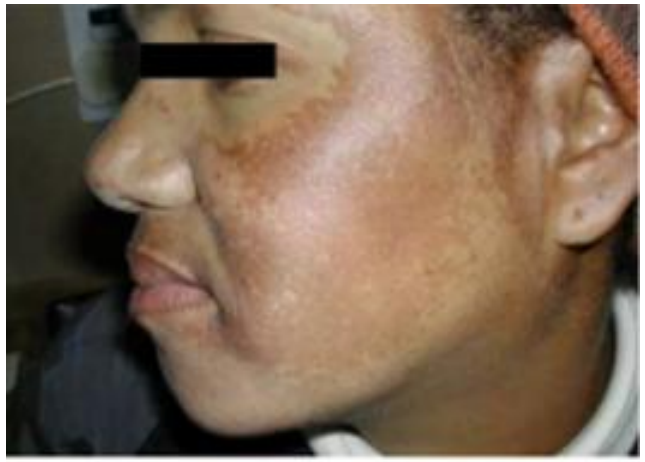
- 1) Physiological changes associated with pregnancy
- 2) Preexisting dermatoses affected by pregnancy
- 3) Dermatoses specific to pregnancy

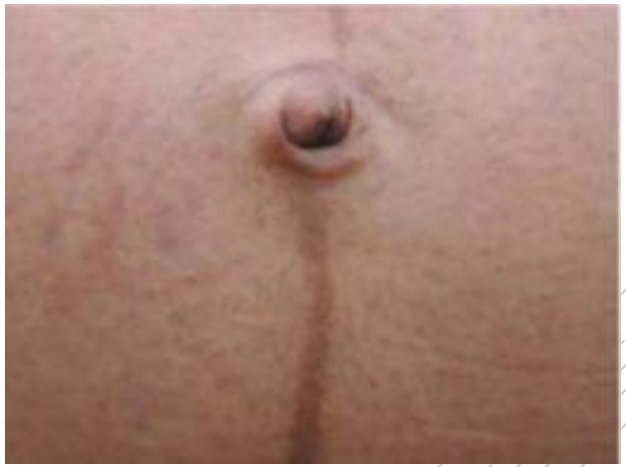
Physiological changes

- Pigmentation
- Vascular
- Structural
- Hair
- Nail

Pigmentary changes

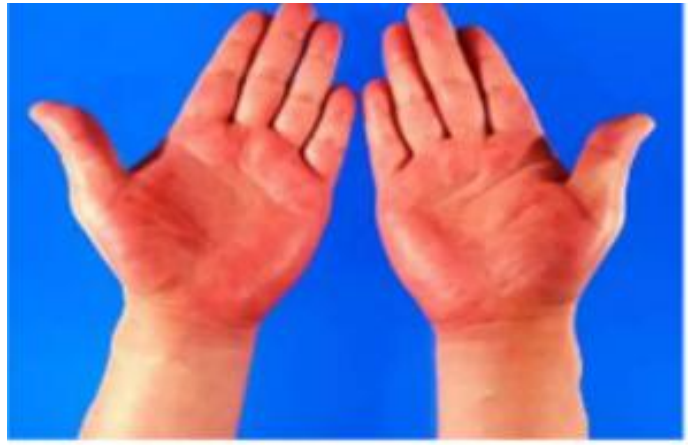
- Melasma
- Hyperpigmentation around areolae
- Linea nigra on abdomen
- Darkening of nevi

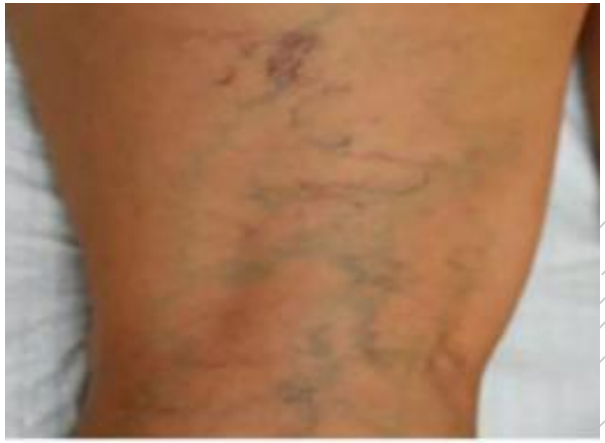




Vascular changes

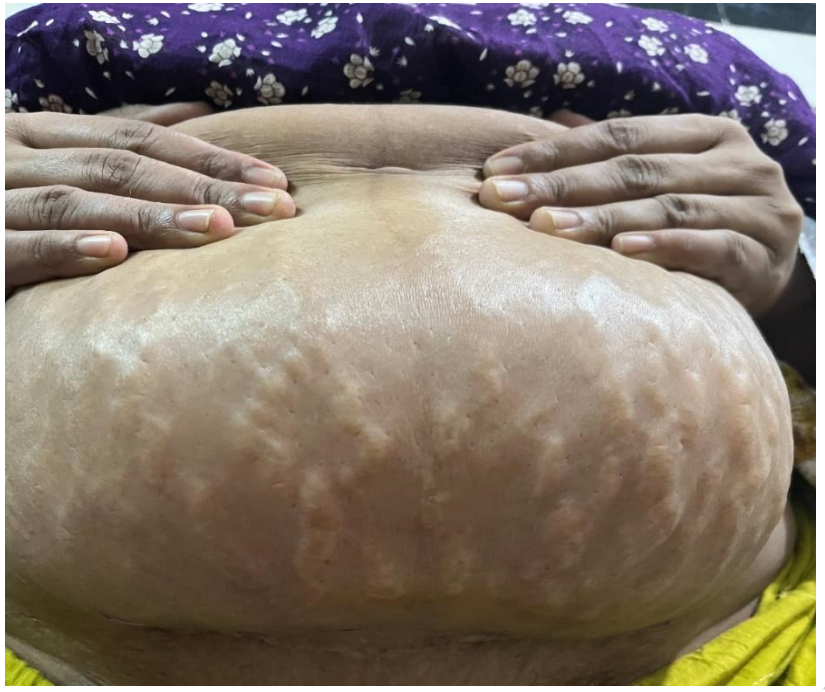
- Spider angioma
- Palmer erythema
- Varicosities
- Non pitting edema
- Pyogenic granuloma





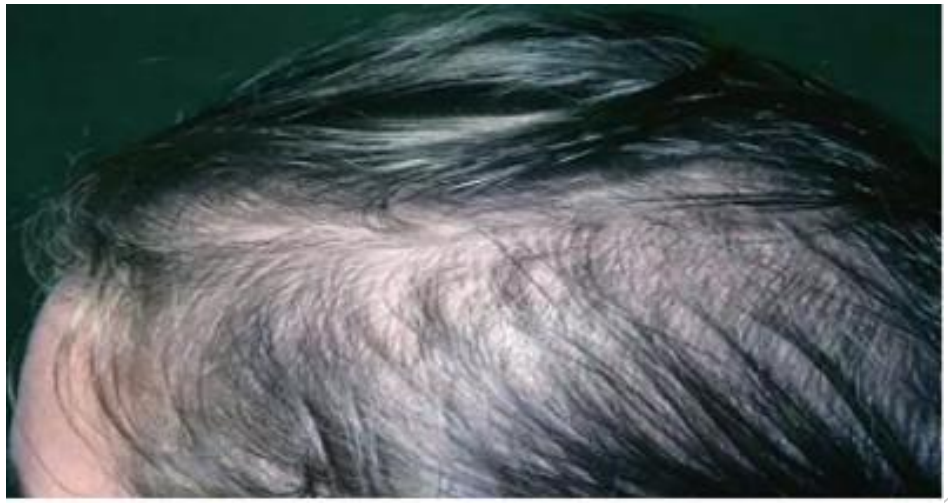
Structural changes

- Striae gravidarum: the most common structural changes in pregnancy are striae distensae, also known as striae gravidarum.



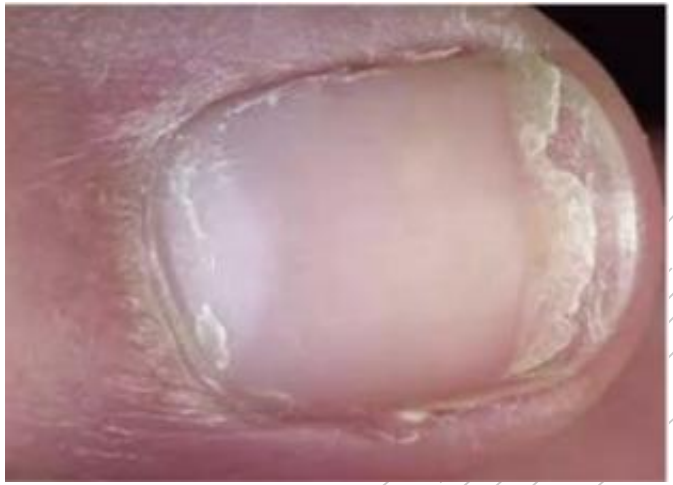
Hair changes

- Thickening of scalp hair
- Hypertrichosis (prolongation of the anagen phase)
- Androgenic alopecia



Nail changes

- Onycholysis
- Brittleness
- Subungual hyperkeratosis
- Transverse grooving



Disease potentially worsens during pregnancy

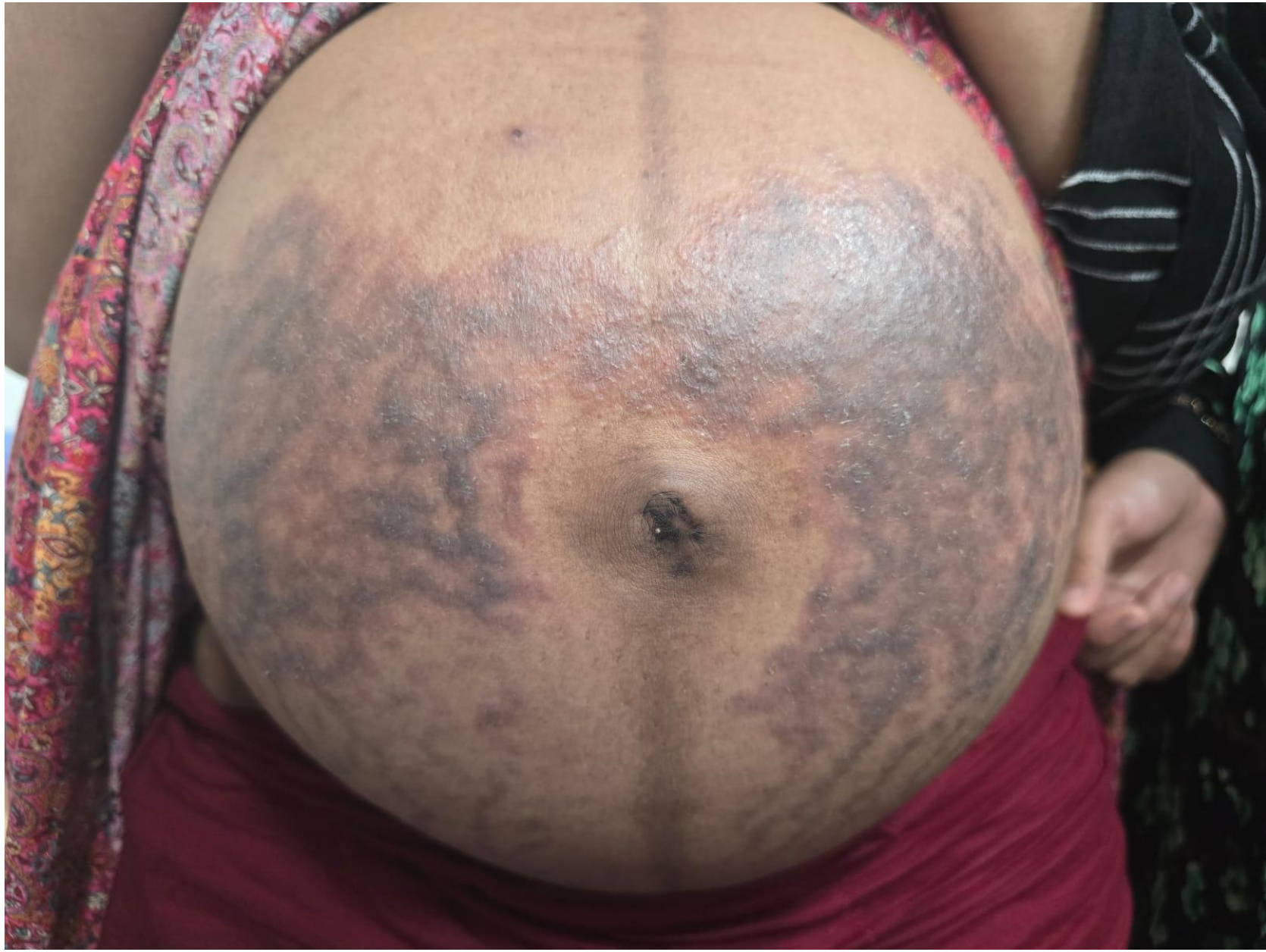
- Infectious
- Immune-mediated disease
- Metabolic diseases

INFECTIONS	i. Candida vaginitis ii. Trichomoniasis iii. Wart iv. Herpes simplex infection v. Leprosy
IMMUNE MEDIATED DISEASE	Systemic Lupus Erythematosus
METABOLIC DISEASES	i. Diabetes Mellitus ii. Thyroid disorder

Well-defined dermatoses associated with pregnancy

- Pruritic urticarial papules and plaques of pregnancy(PUPPP)
- Prurigo gravidarum
- Recurrent cholestasis of pregnancy
- Impetigo herpetiformis (Pustular Psoriasis in pregnancy)
- Pemphigoid gestationis (Herpes gestationis)

CASE 1



PUPPP

- A 27 years old primigravida at 36 weeks of gestation
- Patient presented with:

i) Erythematous papules and plaques over the abdomen for 2 weeks.

ii) Severe itching for 2 weeks

- No prior history of atopy, drug intake

On examination

- On palpation - multiple swollen papules and plaques with raised local temperature and mild tenderness over the abdomen
- No vesicle and bullae or mucosal involvement
- Other systemic examination was normal.

We treated her with -

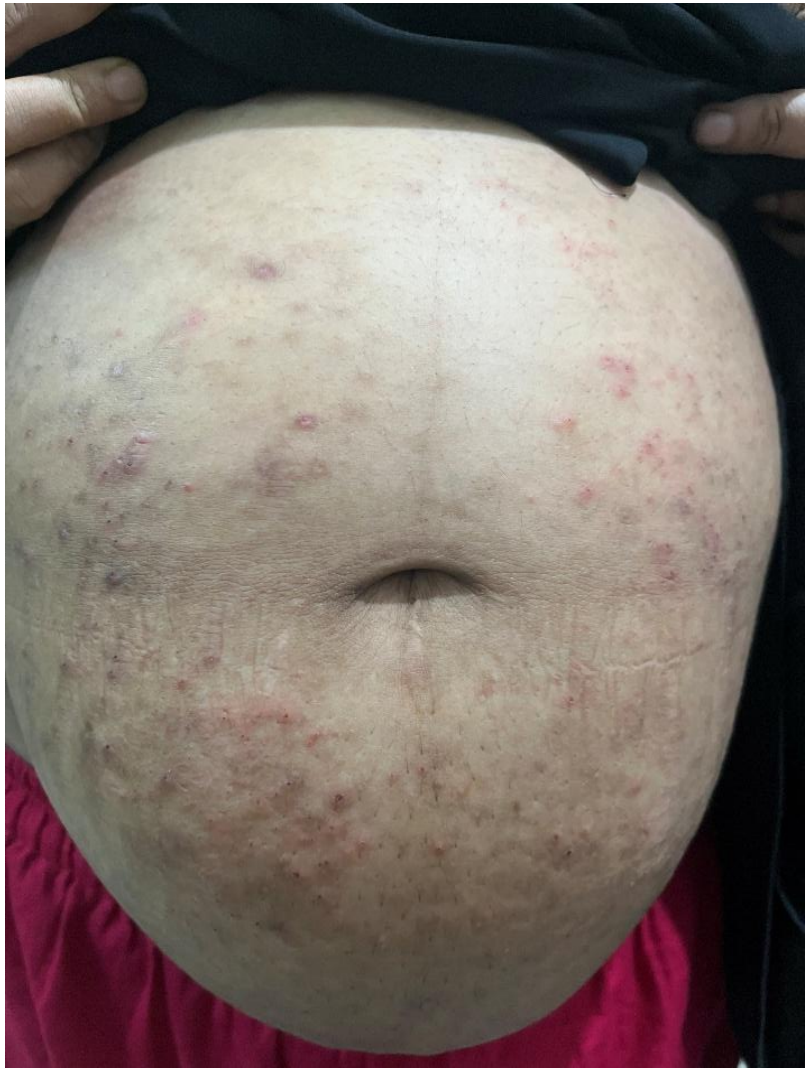
- We counseled her
- The medication prescribed:

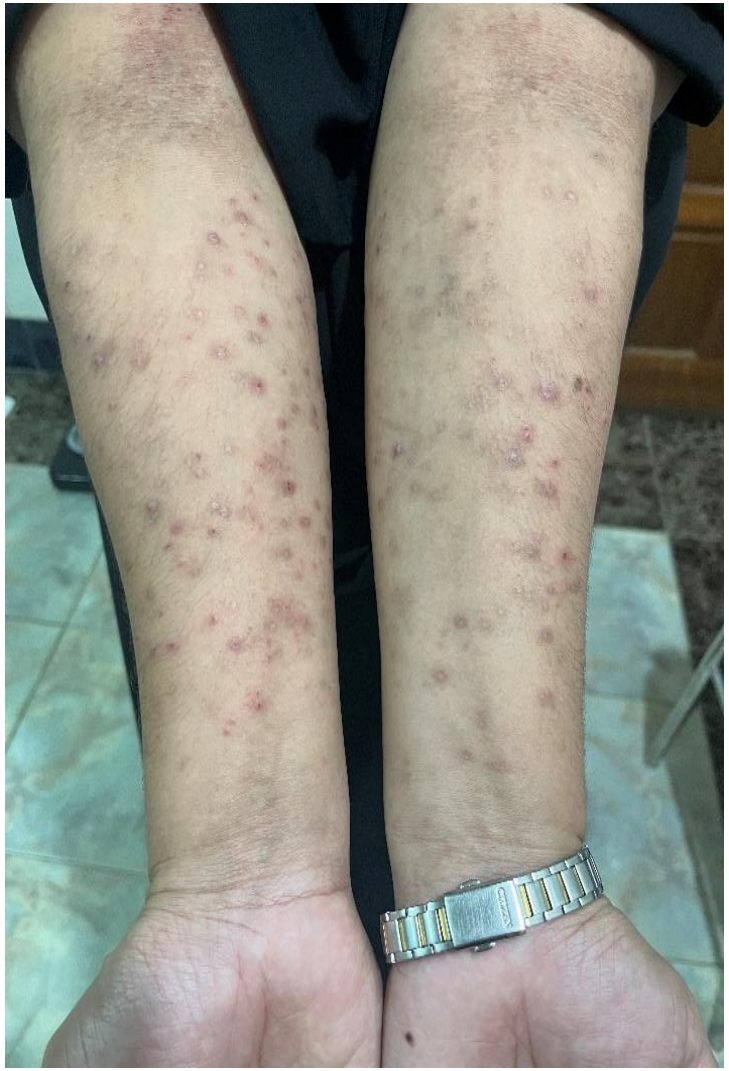
i. Tab. CETIRIZINE 10mg
0+0+1 for 10 days

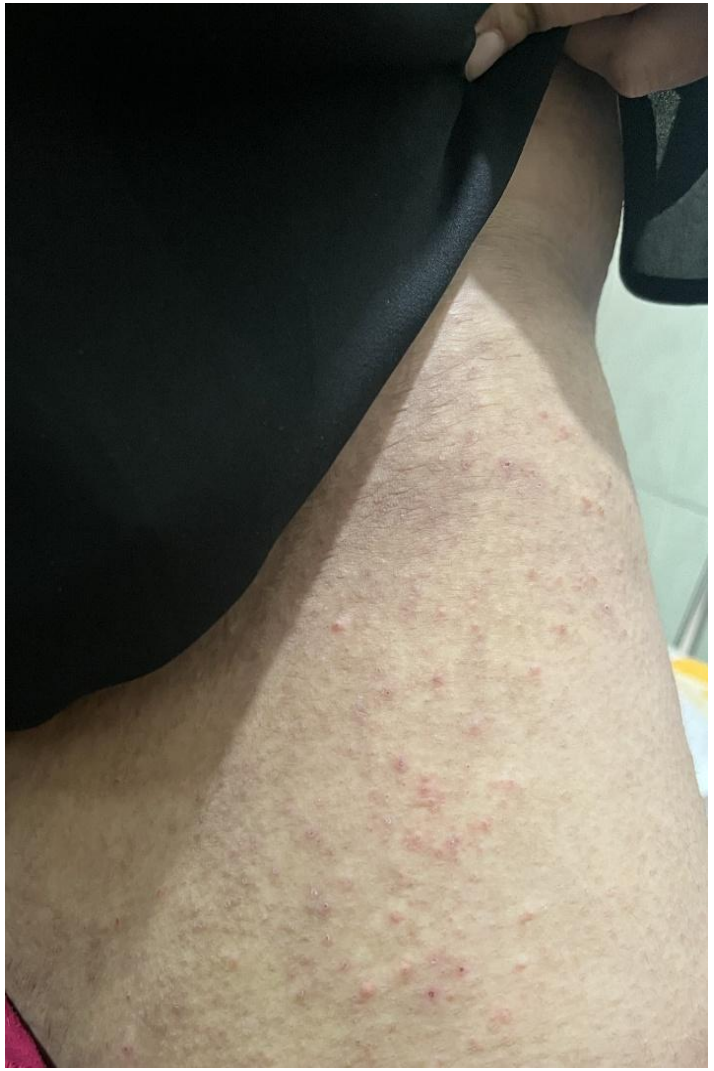
ii. Ointment FLUOCINOLONE ACETONIDE 0.025%
twice daily locally for 2 weeks

iii. Cream Light liquid paraffin+white soft paraffin
twice daily locally for 1 month

CASE 2







PRURIGO GRAVIDARUM

- A 26 years old multiparous female at her 23 weeks of gestation
- Patient presented with:

i)Multiple papules over the abdomen, hands, and legs for 15 days

ii)Severe itching; worsens at night for 15 days

- She has a previous history of atopy

On examination

- On palpation - multiple small, discrete, firm, erythematous papules over the abdomen and limbs, with few excoriation marks
- Other systemic examination was normal.
- Investigations – i) CBC

  ii) Serum IgE

  iii) ALT & ALP

We treated her with-

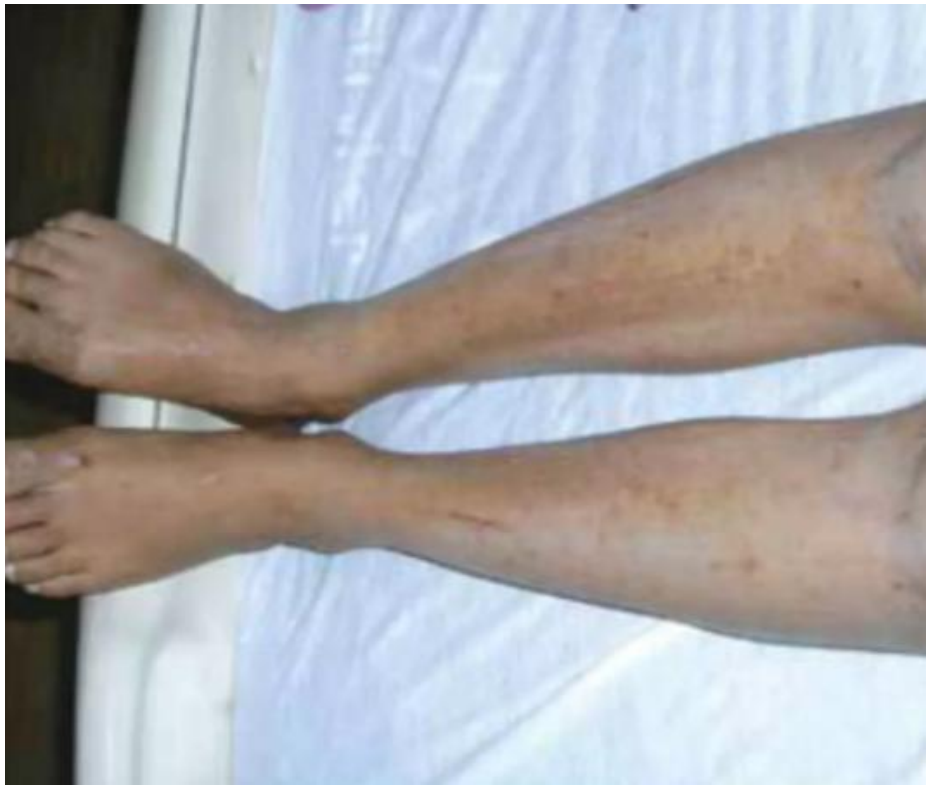
- We counseled the patient
- The medication prescribed:

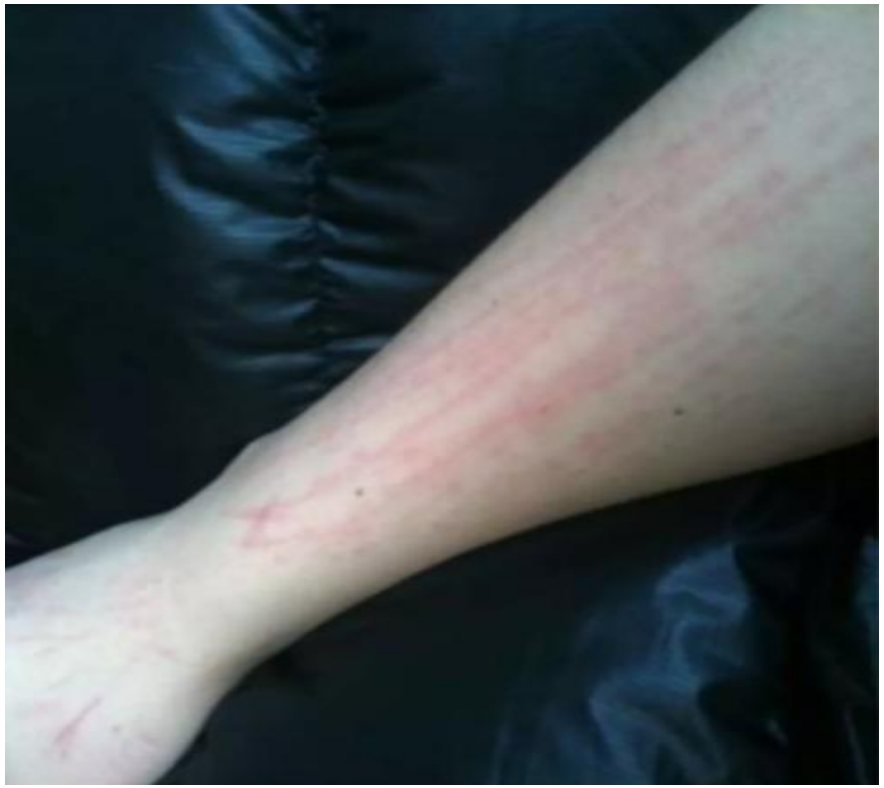
i. Tab. MEBHYDROLIN 50mg
   1+0+1 for 15 days

ii. Oint. CLOBETASOL PROPIONATE O.O5%
   apply twice daily locally for 2 weeks

iii. Light liquid paraffin +white soft paraffin+ Glycerin
   apply twice daily for 2 months

CASE 3





Intrahepatic Cholestasis in Pregnancy

- A 28 years old primigravida at 32 weeks of pregnancy
- Presented with intense generalized itching for 10 days
- Itching is more pronounced over the palms and soles
- No specific skin lesions; only excoriations marks present

INVESTIGATIONS

i) Total bile acids

ii) ALT/AST

iii) GGT

iv) Bilirubin

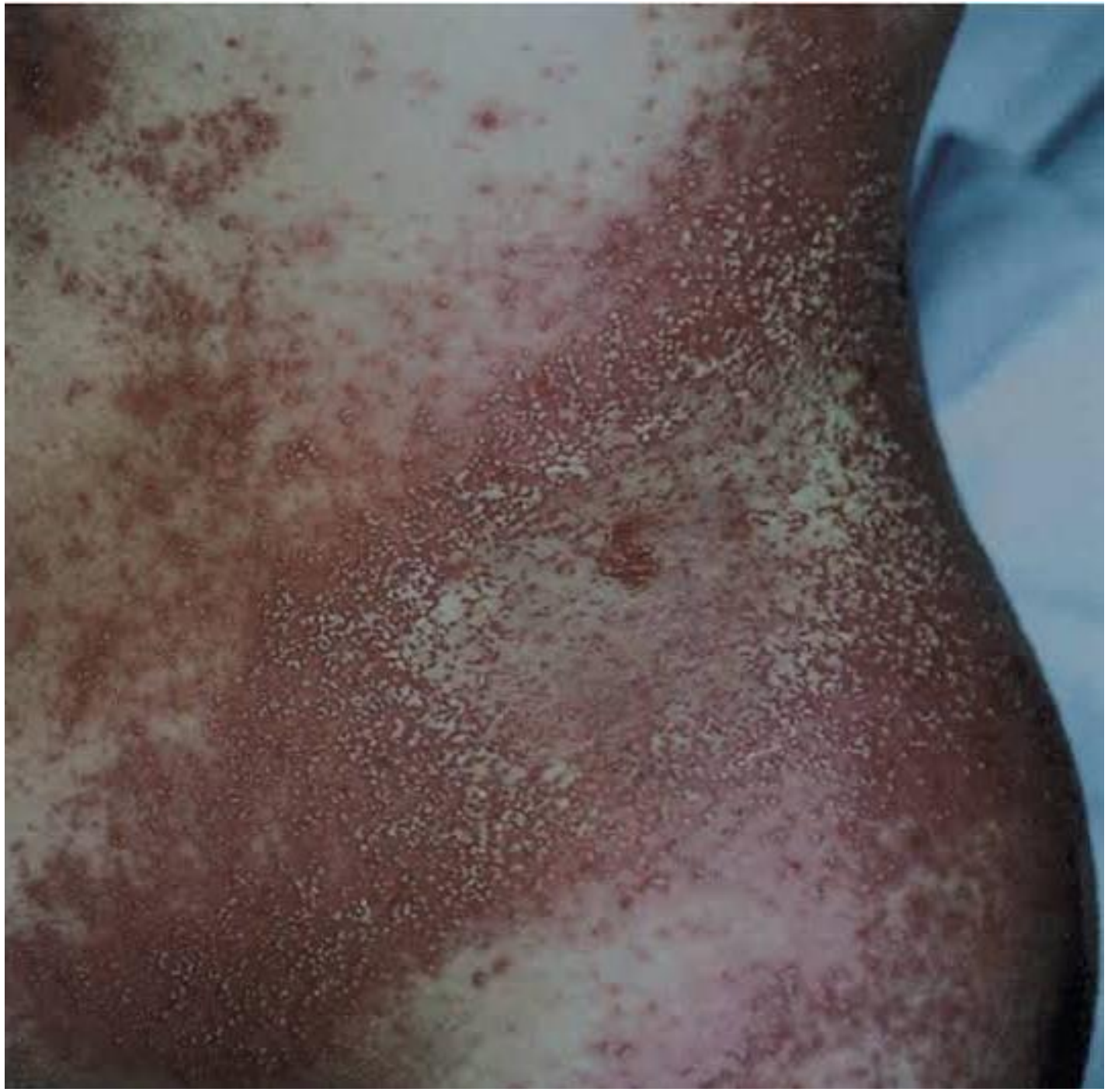
TREATMENT

- Can lead to fetal stillbirth, preterm labor, and meconium aspiration.
- Treatment :

  i) URSODEOXYCHOLIC ACID

  ii) Antihistamine

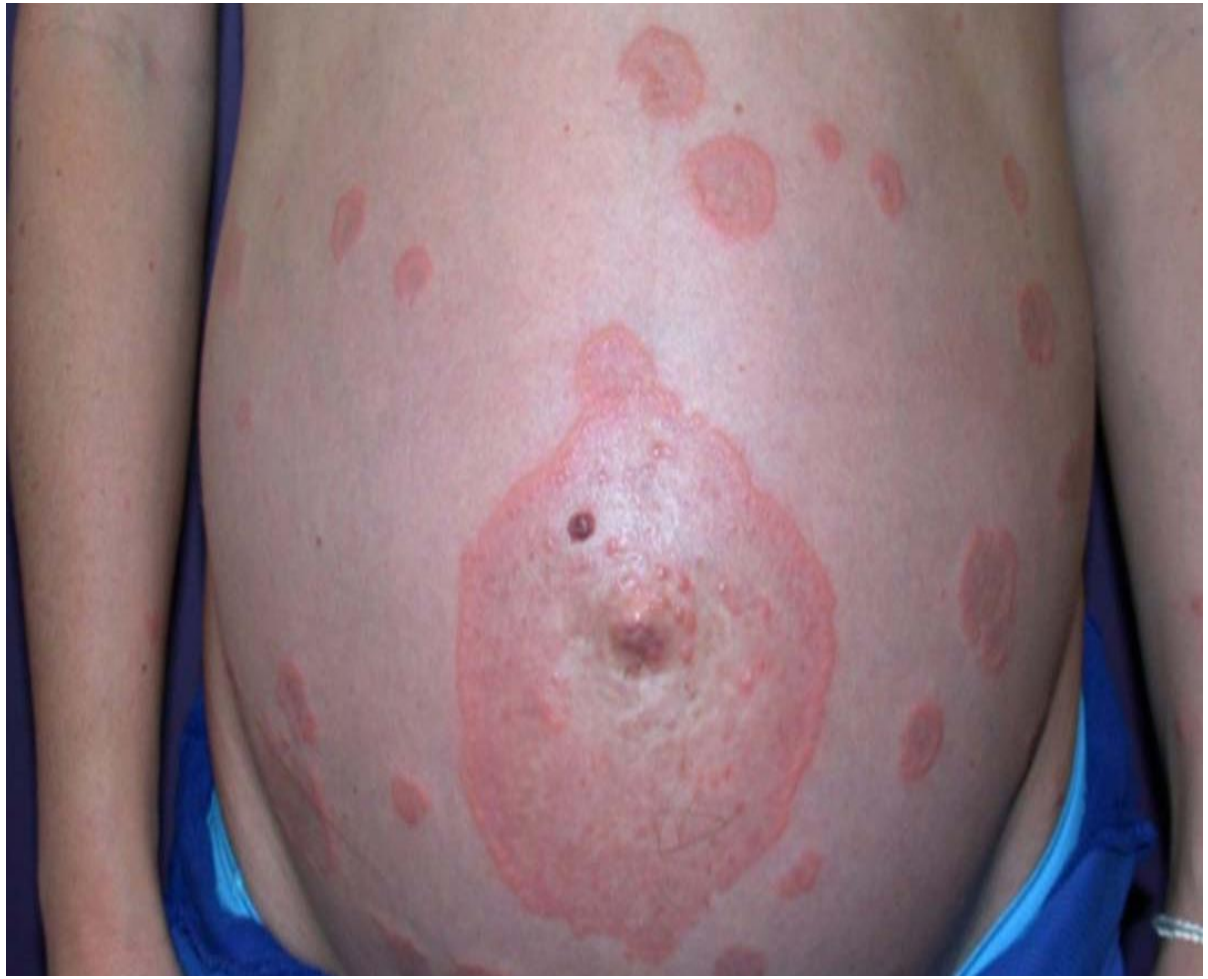
  iii) planning of early delivery

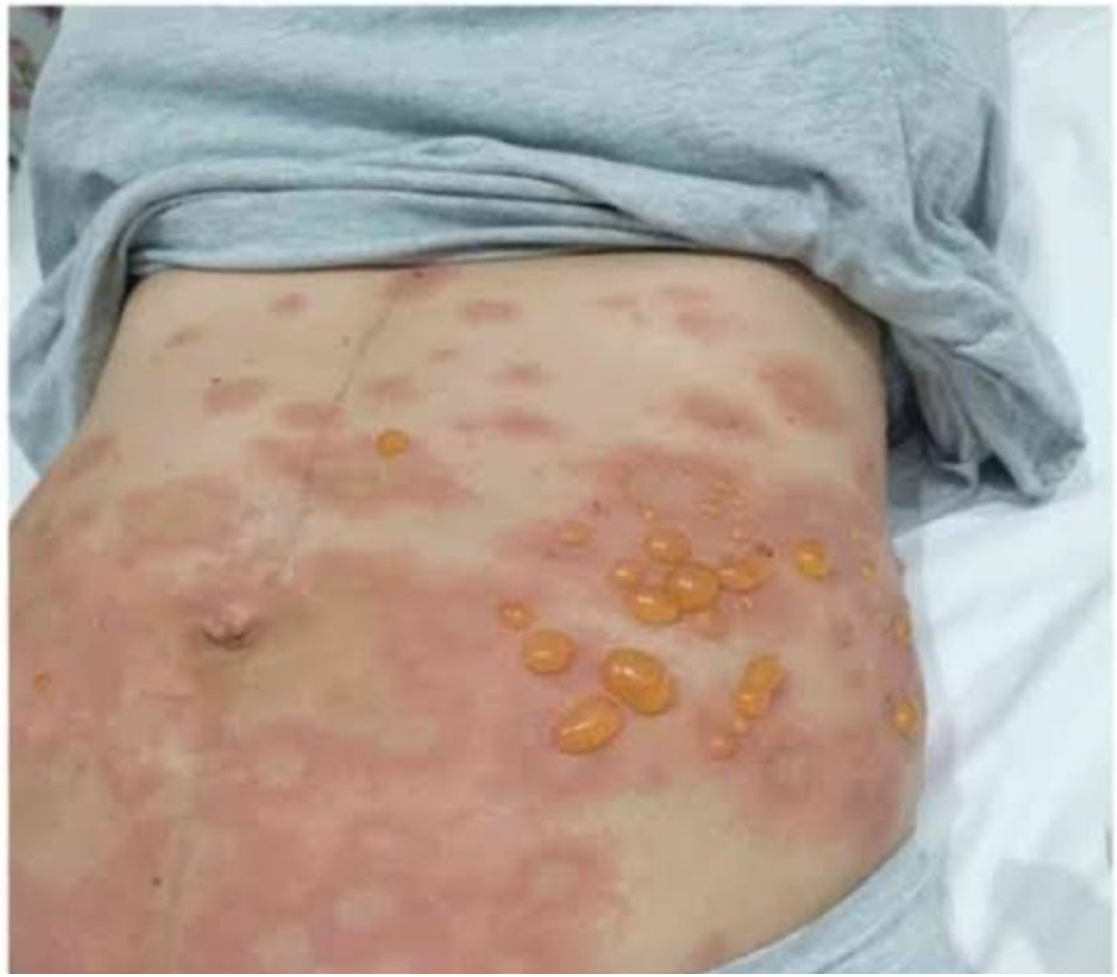


Impetigo Herpetiformis

- Onset – 3rd trimester
- Presentation – sterile pustules on erythematous skin
- Site of lesion – flexural surfaces → generalized spread
- Fever and systemic toxicity present
- High maternal & fetal risk

- Requires urgent management
- Confirmatory test - skin biopsy for histopathology
- Specific treatment – systemic corticosteroid (PREDNISOLONE 40-60mg/day; gradual tapering after lesion control)





Pemphigoid Gestationis

- Autoimmune blistering disease
- Appears in 2nd or 3rd trimester
- Starts around the umbilicus
- Patient presents with severe itching and bullae
- May recur in future pregnancies

- Risk: i) preterm labor

  ii) low birth weight baby

- Confirmatory test – Skin biopsy for histopathology with DIF

- Treatment:

i)Systemic corticosteroid

ii) Antihistamine

iii) Dermatology & obstetric care

Miscellaneous disorder

- Scabies
- Tinea infection
- Acne vulgaris
- Pruritic folliculitis in pregnancy
- Drug reaction

Case study

MedCrave

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Research Article

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Dermatoses of pregnancy. A prospective study from Benghazi, Libya

Abstract

Introduction: Cutaneous findings in pregnancy can be physiologic, coincidental, alterations in pre-existing skin diseases or pregnancy specific. The Pregnancy dermatoses can impact the health of the pregnant woman and the fetus.

Objectives: Our objective was to determine the spectrum of skin disease associated with pregnancy and to identify the various types of pregnancy specific dermatoses and their fetal risk.

Materials & methods: A prospective study was performed at dermatology out-patient department of Jamhoria hospital and Ibn Sina polyclinic, Benghazi-Libya over a period of 2 years. A total of 200 pregnant women presented with dermatological complaint were included. History, skin examination, and relevant investigations were performed. The patients with pregnancy specific dermatoses were followed up till delivery and the pregnancy outcome was recorded. The results were analyzed using SPSS. Results: Mean age was 32 years, 62% was multigravidae and 54% of pregnancy dermatoses occurred during third trimester. The highest number of cases presented with coincidental or preexisting diseases (71%); infections (34%), pre-existing skin diseases included eczema (13%), acne vulgaris (4%) and psoriasis (3%) Hyperpigmentation and striagravidarum represented the main physiological changes (17%). Specific pregnancy dermatoses were present in 12%, these were intrahepatic cholestasis of pregnancy (8%), atopic eruption of pregnancy (3%), pemphigoid gestation is (3%) and polymorphic eruption of pregnancy (2%). Fetal complications including fetal mortality were reported with pemphigoid gestation is (30%) and intrahepatic cholestasis of pregnancy (25%).

Conclusion: This study provides important data on the spectrum of pregnancy dermatoses in Libyan patients. Most of the reported pregnancy dermatoses were benign with no adverse effect on the fetus. Pemphigoid gestation is and intrahepatic cholestasis of pregnancy can be a source of significant fetal risk. To the best of our knowledge this is the first study carried out on pregnancy dermatoses in Benghazi, Libya.

Keywords: dermatoses, pregnancy, pemphigoid gestationis, intrahepatic cholestasis

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Abbreviations: AEP, atopic eruption of pregnancy, PEP polymorphic eruption of pregnancy; PG, pemphigoid gestationis; ICP, intrahepatic cholestasis of pregnancy

Introduction

Many skin changes occur during pregnancy as a result of the altered endocrine, metabolic and immunological state. These can be grouped into physiological cutaneous changes, coincidental or preexisting diseases modified by pregnancy and specific dermatoses of pregnancy. The pregnancy specific dermatoses occur exclusively during pregnancy. They have been classified as atopic eruption of pregnancy (AEP), polymorphic eruption of pregnancy (PEP), pemphigoid gestationis (PG) and intrahepatic cholestasis of pregnancy (ICP). They can impact the health of the pregnant woman and the fetus.[1,2]

Objectives

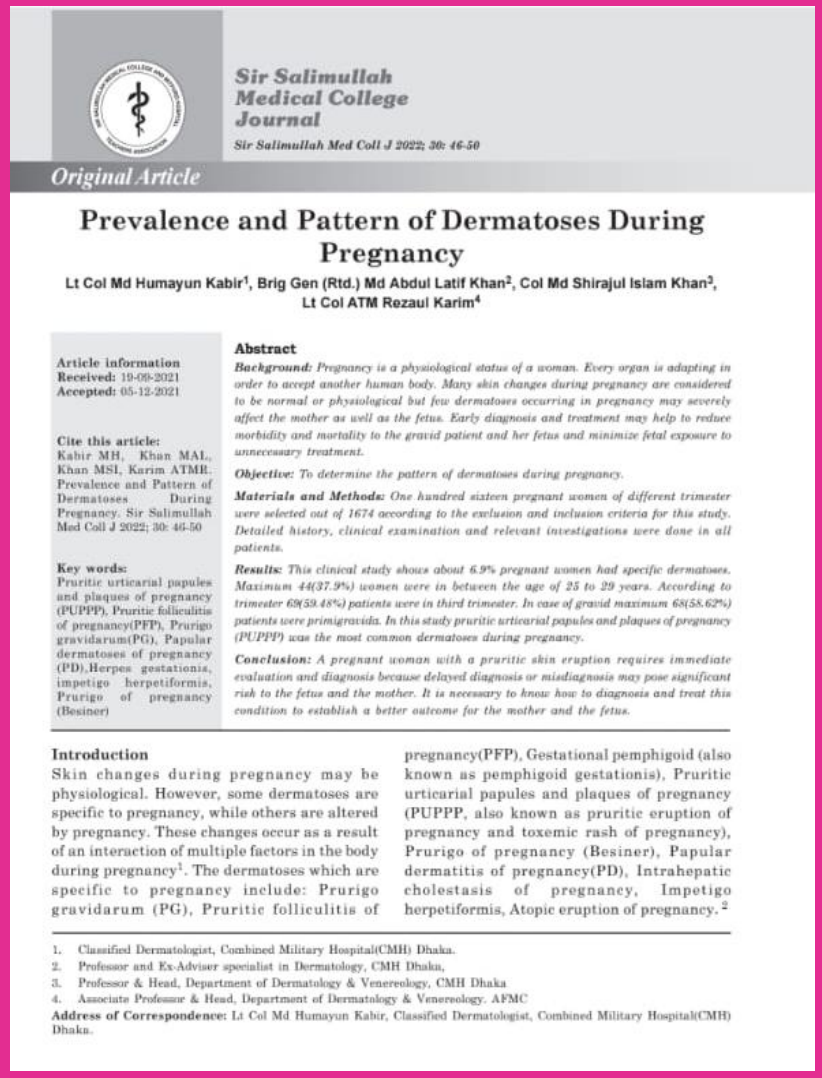
Our objective was to determine the spectrum of skin disease associated with pregnancy and to identify the various types of pregnancy specific dermatoses and their fetal risk.

Materials and methods

A prospective study was performed at dermatology out-patient department of Jamhoria hospital and Ibn Sina polyclinic, Benghazi-Libya over a period of 2 years. A total of 200 pregnant women presented with dermatological complaint were included. History, skin examination, and relevant investigations were performed. The Patients with pregnancy specific dermatoses were followed up till delivery and the pregnancy outcome was recorded. The results were analyzed using SPSS.

Results

Mean age was 32 years, 62% was multigravidae and 54% of pregnancy dermatoses occurred during third trimester. The highest number of cases presented with coincidental or preexisting diseases (71%); infections were the commonest (34%); vulvar candidiasis was reported in 8%, scabies (6%), viral wart (5%), Chicken pox (2%) and measles (1%). Inflammatory skin diseases included eczema (13%), acne vulgaris (4%) plaque psoriasis (3%)and pustular psoriasis (2%). Hyperpigmentation and strica gravidarum represented the main physiological changes (17%). Specific pregnancy dermatoses were present in 12%, these were ICP(4%), AEP(3%), PG(3%) and PEP



Sir Salimullah Medical College Journal

Sir Salimullah Med Coll J 2022; 30: 46-50

Original Article

Prevalence and Pattern of Dermatoses During Pregnancy

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Key words:
Pruritic urticarial papules and plaques of pregnancy (PUPPP), Pruritic folliculitis of pregnancy(PFP), Prurigo gravidarum(PG), Papular dermatoses of pregnancy (PD),Herpes gestationis, impetigo herpetiformis, Prurigo of pregnancy (Besiner)

Abstract

Background: *Pregnancy is a physiological status of a woman. Every organ is adapting in order to accept another human body. Many skin changes during pregnancy are considered to be normal or physiological but few dermatoses occurring in pregnancy may severely affect the mother as well as the fetus. Early diagnosis and treatment may help to reduce morbidity and mortality to the gravid patient and her fetus and minimize fetal exposure to unnecessary treatment.*

Objective: *To determine the pattern of dermatoses during pregnancy.*

Materials and Methods: *One hundred sixteen pregnant women of different trimester were selected out of 1674 according to the exclusion and inclusion criteria for this study. Detailed history, clinical examination and relevant investigations were done in all patients.*

Results: *This clinical study shows about 6.9% pregnant women had specific dermatoses. Maximum 44(37.9%) women were in between the age of 25 to 29 years. According to trimester 69(59.48%) patients were in third trimester. In case of gravid maximum 68(58.62%) patients were primigravida. In this study pruritic urticarial papules and plaques of pregnancy (PUPPP) was the most common dermatoses during pregnancy.*

Conclusion: *A pregnant woman with a pruritic skin eruption requires immediate evaluation and diagnosis because delayed diagnosis or misdiagnosis may pose significant risk to the fetus and the mother. It is necessary to know how to diagnosis and treat this condition to establish a better outcome for the mother and the fetus.*

Introduction

Skin changes during pregnancy may be physiological. However, some dermatoses are specific to pregnancy, while others are altered by pregnancy. These changes occur as a result of an interaction of multiple factors in the body during pregnancy[1]. The dermatoses which are specific to pregnancy include: Prurigo gravidarum (PG), Pruritic folliculitis of pregnancy(PFP), Gestational pemphigoid (also known as pemphigoid gestationis), Pruritic urticarial papules and plaques of pregnancy (PUPPP, also known as pruritic eruption of pregnancy and toxemic rash of pregnancy), Prurigo of pregnancy (Besiner), Papular dermatitis of pregnancy(PD), Intrahepatic cholestasis of pregnancy, Impetigo herpetiformis, Atopic eruption of pregnancy. [2]

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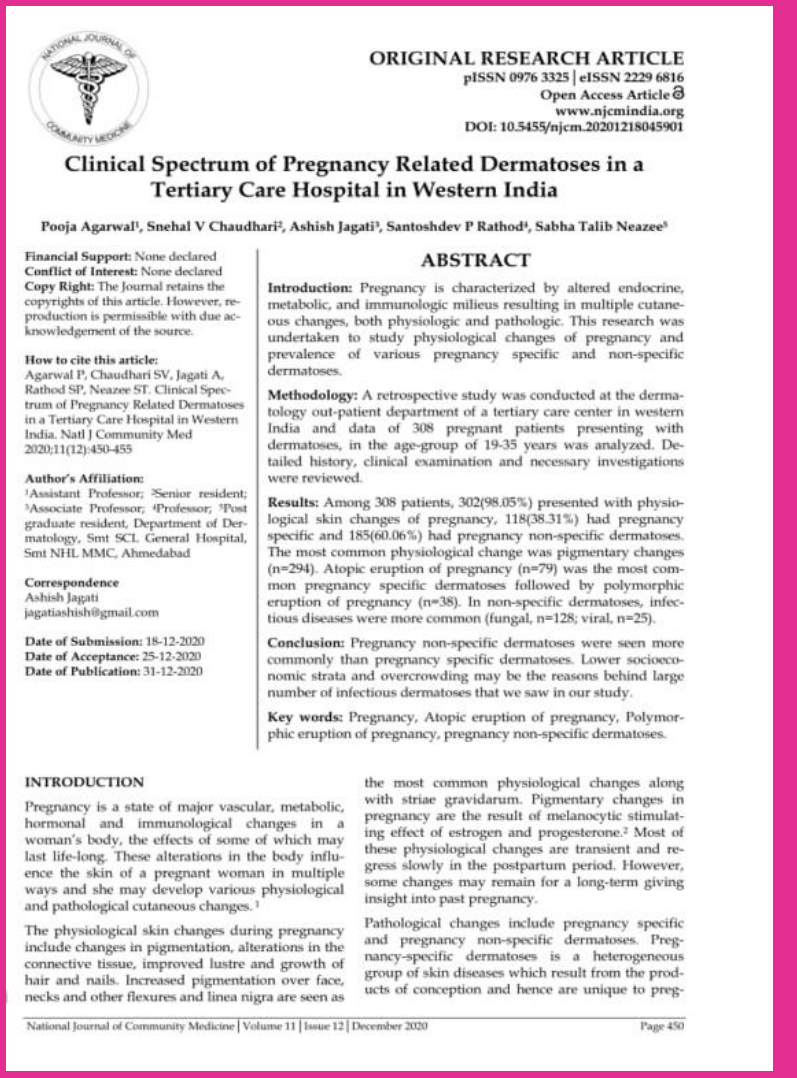

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Clinical Spectrum of Pregnancy Related Dermatoses in a Tertiary Care Hospital in Western India

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ABSTRACT

Introduction: Pregnancy is characterized by altered endocrine, metabolic, and immunologic milieus resulting in multiple cutaneous changes, both physiologic and pathologic. This research was undertaken to study physiological changes of pregnancy and prevalence of various pregnancy specific and non-specific dermatoses.

Methodology: A retrospective study was conducted at the dermatology out-patient department of a tertiary care center in western India and data of 308 pregnant patients presenting with dermatoses, in the age-group of 19-35 years was analyzed. Detailed history, clinical examination and necessary investigations were reviewed.

Results: Among 308 patients, 302(98.05%) presented with physiological skin changes of pregnancy, 118(38.31%) had pregnancy specific and 185(60.06%) had pregnancy non-specific dermatoses. The most common physiological change was pigmentary changes (n=294). Atopic eruption of pregnancy (n=79) was the most common pregnancy specific dermatoses followed by polymorphic eruption of pregnancy (n=38). In non-specific dermatoses, infectious diseases were more common (fungal, n=128; viral, n=25).

Conclusion: Pregnancy non-specific dermatoses were seen more commonly than pregnancy specific dermatoses. Lower socioeconomic strata and overcrowding may be the reasons behind large number of infectious dermatoses that we saw in our study.

Key words: Pregnancy, Atopic eruption of pregnancy, Polymorphic eruption of pregnancy, pregnancy non-specific dermatoses.

INTRODUCTION

Pregnancy is a state of major vascular, metabolic, hormonal and immunological changes in a woman's body, the effects of some of which may last life-long. These alterations in the body influence the skin of a pregnant woman in multiple ways and she may develop various physiological and pathological cutaneous changes. [1]

The physiological skin changes during pregnancy include changes in pigmentation, alterations in the connective tissue, improved lustre and growth of hair and nails. Increased pigmentation over face, necks and other flexures and linea nigra are seen as the most common physiological changes along with striae gravidarum. Pigmentary changes in pregnancy are the result of melanocytic stimulating effect of estrogen and progesterone.[2] Most of these physiological changes are transient and regress slowly in the postpartum period. However, some changes may remain for a long-term giving insight into past pregnancy.

Pathological changes include pregnancy specific and pregnancy non-specific dermatoses. Pregnancy-specific dermatoses is a heterogeneous group of skin diseases which result from the products of conception and hence are unique to preg-

MYTHS vs FACTS

CATEGORY	MYTH	FACT
Pregnancy Glow	Every pregnant woman gets a radiant “Pregnancy glow.”	The “glow” is a real phenomenon caused by increased blood flow and oil production but it does not happen to everyone. Many women experience acne , dryness, or melasma instead.

CATEGORY	MYTH	FACT
Itching	Itching is a normal, harmless part of every pregnancy and can be ignored.	While mild itching from stretching skin is common, severe itching, especially on the palms and soles of the feet, can be a symptom of a serious liver condition called **intrahepatic cholestasis of pregnancy,** which requires medical attention.

CATEGORY	MYTH	FACT
Stretch Marks	Expensive cream can completely prevent stretch marks.	Stretch marks are largely due to genetics, skin type, and rapid weight gain. Moisturizers can help with dryness and itchiness and keep the skin soft, but the marks typically fade on their own after delivery (though they may never disappear completely)

CATEGORY	MYTH	FACT
Skincare Safety	All skincare products must be avoided during pregnancy to protect the baby.	Many skincare ingredients are safe, such as topical Benzoyl peroxide, Azelaic acid, and Hyaluronic acid. However, certain ingredients like Retinoids (Isotretinoin) and Hydroquinone should be strictly avoided.

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CATEGORY	MYTH	FACT
Baby's gender	Itchy skin can predict the baby's gender.	There is no medical evidence to support this; a baby's gender cannot be predicted by skin symptoms

CATEGORY	MYTH	FACT
Condition severity	All pregnancy skin issues are benign and resolve after delivery.	Most are benign, but some conditions like Intrahepatic Cholestasis and Pemphigoid gestationis carry potential risk for the fetus (e.g., preterm birth) and require close medical surveillance.

Take Home Message

- Physiological changes are common.
- Don’t ignore intense itching.
- Blisters are a red flag.
- Most rashes are benign.
- Treatment requires caution.
- Distinguish between normal and pathological skin conditions.

Take Home Message

- Diagnosis is key for management.
- Treatment prioritizes safety.
- Multidisciplinary care is essential.
- Patient education is crucial
- Itching should be investigated.


thank you!