IN THE NAME OF GOD

GESTATIONAL PEMPHIGOID

(HERPES GESTATIONIS)

GESTATIONAL PEMPHIGOID (HERPES GESTATIONIS)

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- Bullous pemphigoid (BP) is the most common autoimmune subepidermal blistering disease, and its onset is often after 60 years of age

Pemphigoid Gestationis

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BP is associated with tissue-bound and circulating autoantibodies directed against BP antigen 180 (BP180, BPAG2 or type XVII collagen) and BP antigen 230 (BP230 or BPAG1e), components of junctional adhesion complexes called hemidesmosomes that promote dermal–epidermal cohesion.

- **IgG** antibodies are localized to the hemidesmosomal plaque

- ***Pemphigoid Gestationis*** (or ***gestational pemphigoid***) is also a variant of BP, which typically occurs during pregnancy

- Rare, pruritic, vesiculobullous eruption that develops during late pregnancy or the immediate postpartum
- self-limited
- It is the most clearly characterized dermatosis of pregnancy and the only one that may also affect the skin of the newborn.

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- Linear C3 deposition along the basement membrane zone (BMZ) by direct IF

- IgG1 autoantibodies are directed against a transmembrane hemidesmosomal protein (BP180; BPAG2; collagen XVII)

HISTORY

Milton first coined the term "***herpes gestationis***" in 1872 and Bulkley (1874) canonized the term "as embodying the clinical characters of the eruption and signifying at the same time the sex and state of the body in which it appears".

EPIDEMIOLOGY

The incidence of pemphigoid gestationis has been estimated at 1 : 1700 – 1 : 50 000 pregnancies, correlating with the prevalence of HLA-DR3 and -DR4 in different populations

EPIDEMIOLOGY

rarely developed in association with trophoblastic tumors (hydatidiform mole, choriocarcinoma)

PATHOGENESIS

- As in patients with bullous pemphigoid (BP), it is the non-collagenous (NC) segment closest to the plasma membrane of the basal keratinocyte, NC16A, that constitutes the immunodominant region of BP180. Circulating antibodies are almost exclusively directed against this domain

- demonstrated by ELISA and immunoblot studies of maternal or neonatal sera.

PATHOGENESIS

- HLA antigens DR3 or DR4, and, curiously, nearly 50% of patients have the simultaneous presence of both.

PATHOLOGY

The classic histologic finding of a subepidermal vesicle is seen in the minority of patients. Instead, a nonspecific mixed cellular infiltrate containing a variable number of eosinophils is more common.

The presence of eosinophils is the most constant histologic feature of pemphigoid gestationis

PATHOLOGY

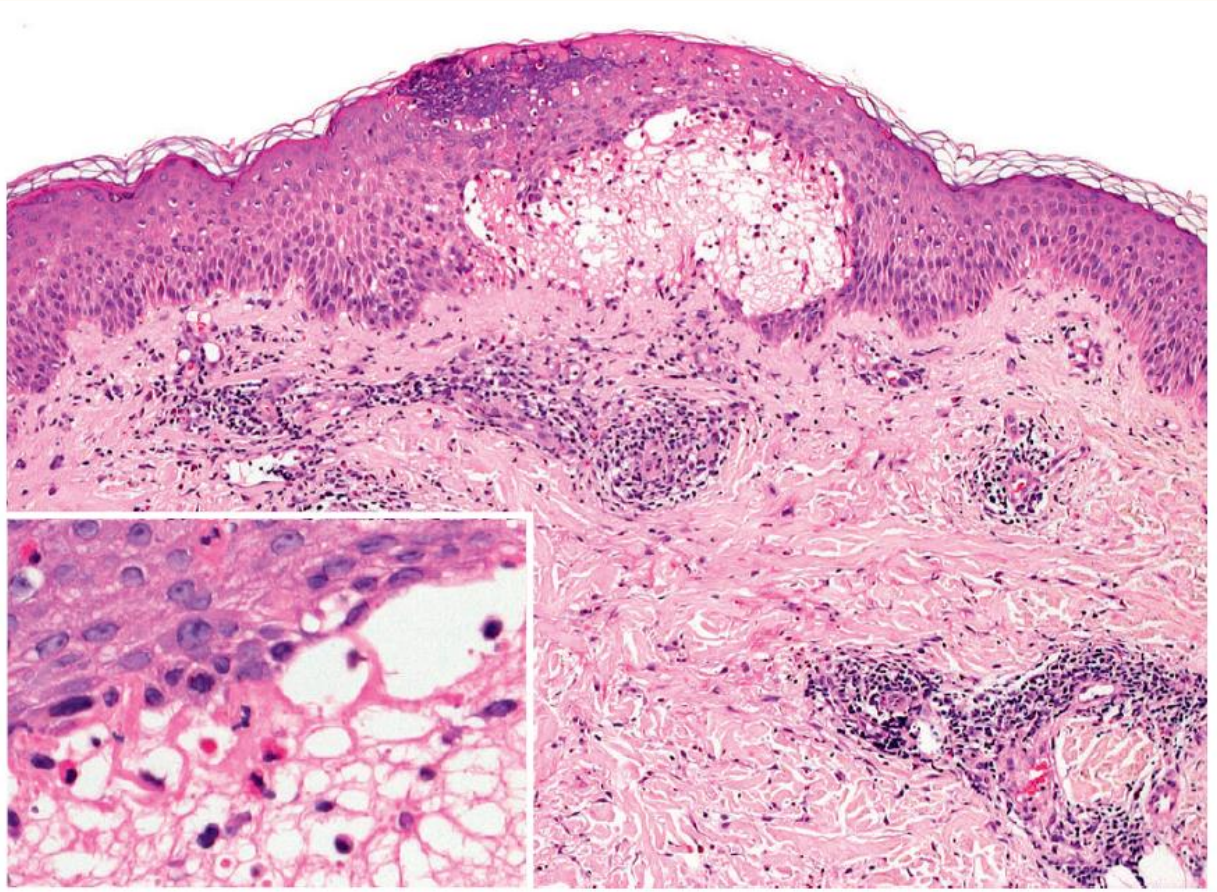

Fig. 27.2 Pemphigoid gestationis – histologic features of an early lesion. Focal subepidermal vesicle accompanied by a superficial and mid dermal perivascular and interstitial mixed inflammatory infiltrate. Eosinophils are seen within the blister cavity and the epidermis (inset). *Courtesy, Lorenzo Cerroni, MD.*

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DIRECT IMMUNOFLUORESCENCE

The essential component for the diagnosis of pemphigoid gestationis is a linear deposition of C3 along the BMZ of perilesional skin by direct IF microscopy. This is observed in 100% of patients, and linear IgG deposition is seen in 30% of patients

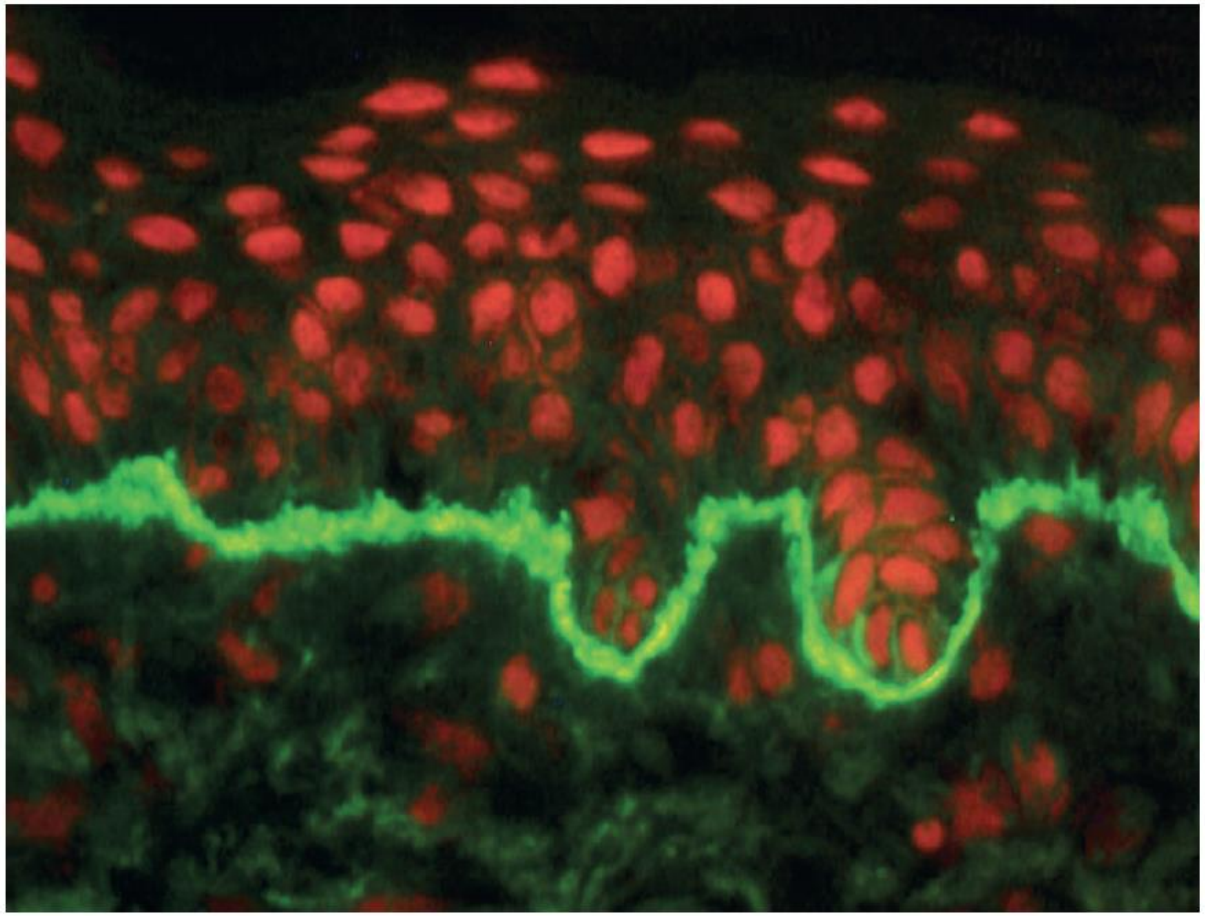

Fig. 27.3 Pemphigoid gestationis – direct immunofluorescence (IF) microscopy. Linear deposits of C3 are seen along the basement membrane zone. *Courtesy, Immunofluorescence Department, St John's Institute of Dermatology, St Thomas' Hospital, London, UK.*

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CLINICAL FEATURES

Pemphigoid gestationis may develop during any trimester as well as immediately postpartum, but classically it presents during late pregnancy.

There is an abrupt onset

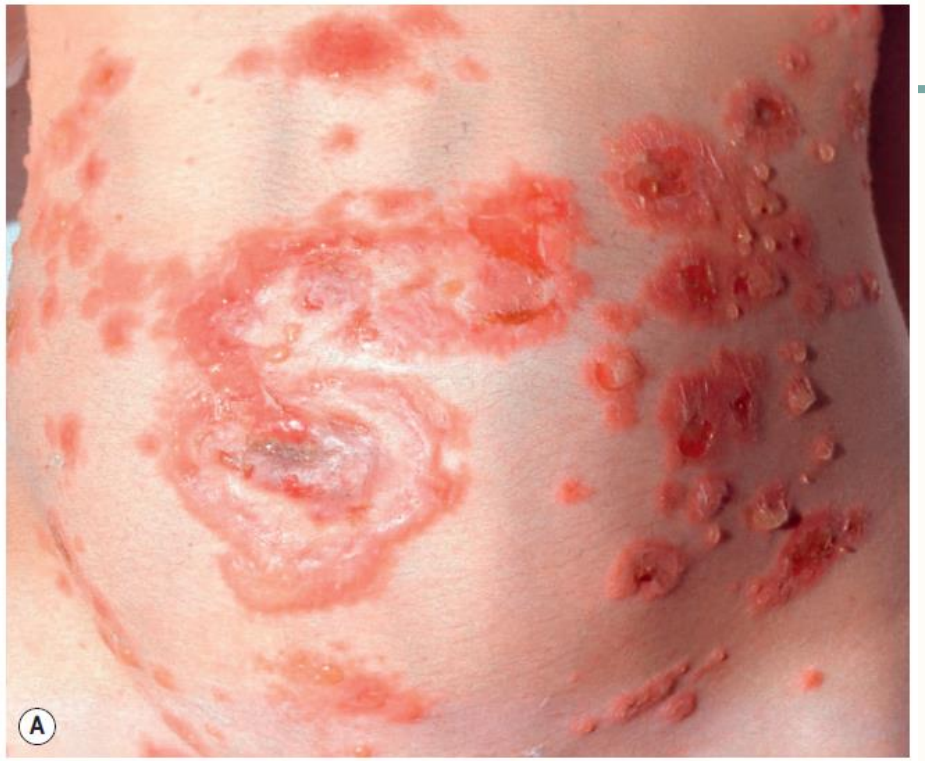
CLINICAL FEATURES

trunk, in particular the abdomen and often within or immediately adjacent to the umbilicus

CLINICAL FEATURES

Rapid progression to a generalized pemphigoidlike eruption then occurs, with pruritic urticarial papules and plaques, followed by clustered (herpetiform) vesicles or tense bullae on an erythematous base.

CLINICAL FEATURES



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CLINICAL FEATURES

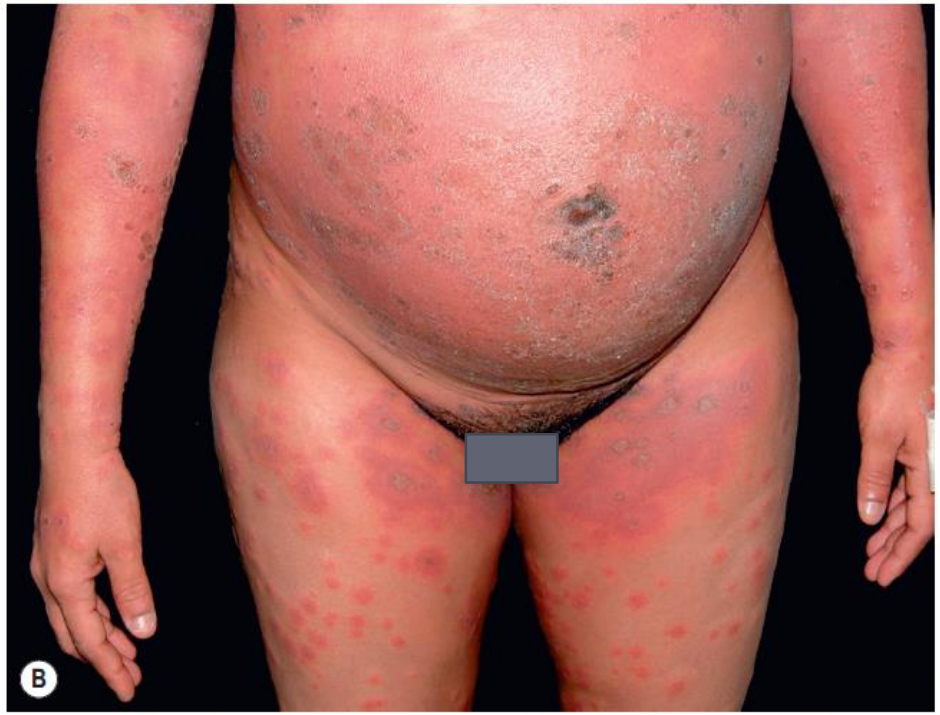

Fig. 27.1 **Pemphigoid gestationis. A** Intact tense bullae arising within areas of edematous erythema as well as erosions due to ruptured bullae; lesions typically involve the umbilical region. **B** Confluent crusted erythematous plaques studded with small vesicles; umbilical involvement is again noted. Dusky urticarial lesions are also present on the thighs. *B, Courtesy, Luis Requena, MD.*

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CLINICAL FEATURES

- The eruption may involve the entire body
- Sparing only the mucous membranes.
- spontaneous improvement during late gestation is common.

Routine laboratory investigations are normal.

DIFFERENTIAL DIAGNOSIS

- The most frequent considerations in the differential diagnosis are PEP(PUPPP)
- drug eruptions
- Bullous SLE
- Bullous pemphigoid
- Linear Ig A bullous dermatosis

direct immunofluorescence (IF)

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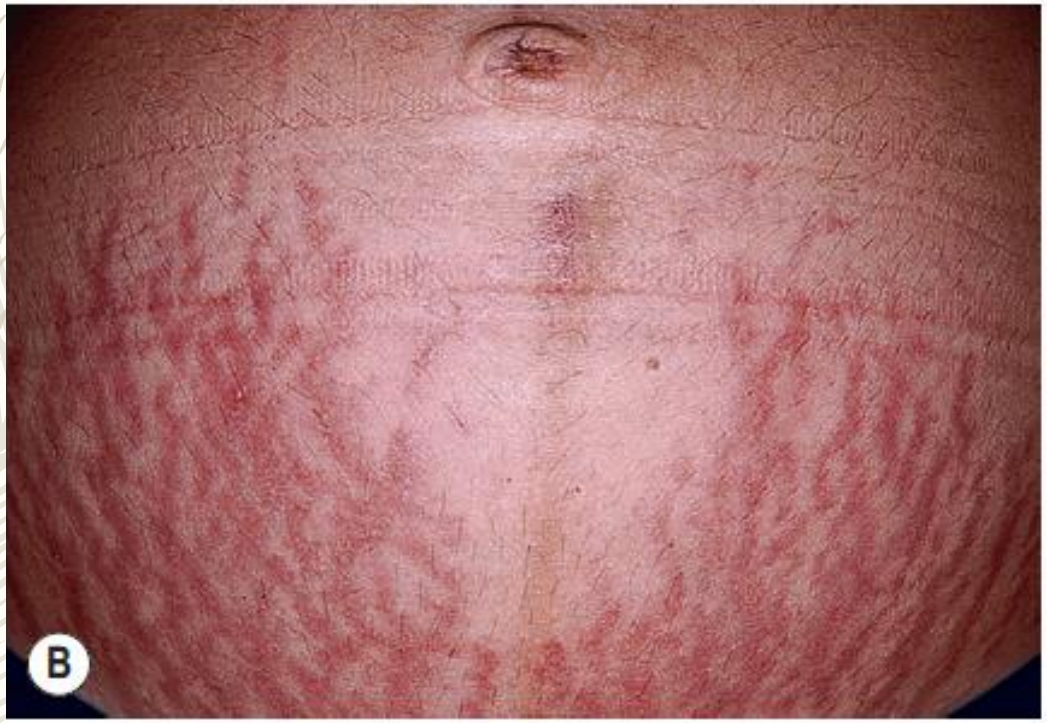
DIFFERENTIAL DIAGNOSIS



Polymorphic Eruption of Pregnancy

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CLASSIFICATION OF THE DERMATOSES OF PREGNANCY	
Classification	**Synonym(s)**
Pemphigoid gestationis*	Herpes gestationis† **Gestational pemphigoid**
Polymorphic eruption of pregnancy (PEP)	Pruritic urticarial papules and plaques of pregnancy (PUPPP)† Toxic erythema of pregnancy Late-onset prurigo of pregnancy Toxemic rash of pregnancy
Intrahepatic cholestasis of pregnancy (ICP)	Cholestasis of pregnancy† Obstetric cholestasis Cholestatic jaundice of pregnancy Pruritus/prurigo gravidarum
Atopic eruption of pregnancy (AEP)	Prurigo of pregnancy*,† Prurigo gestationis (Besnier) Early-onset prurigo of pregnancy (Nurse) Papular dermatitis of pregnancy (Spangler) Pruritic folliculitis of pregnancy* Linear IgM disease of pregnancy Eczema in pregnancy
*Former classification by Holmes & Black (1983)[2]. †Former classification by Shornick (1998)[3].	

Table 27.1 Classification of the dermatoses of pregnancy[1]. The preferred terms are in **bold.**

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MANAGEMENT

Treatment:

The primary goal in treating this self-limited disease is to relieve pruritus and suppress blister formation.

In mild cases, the use of potent topical corticosteroids combined with emollients and systemic antihistamines may be adequate.

MANAGEMENT

Treatment:

systemic corticosteroids remain the cornerstone of therapy .

Most patients respond to 0.5 mg/kg of prednisolone daily; the dose is tapered as soon as blister formation is suppressed.

The common flare associated with delivery usually requires a temporary increase in dosage.

MANAGEMENT

Treatment:

Anecdotal alternatives to corticosteroids (dapsone, doxycycline or minocycline ± nicotinamide, pyridoxine, cyclosporine) or adjuvants (methotrexate, cyclophosphamide, gold, IVIg) have been tried.

None of these medications, with the possible exception of cyclosporine, are safe prior to term and thus should be avoided.

MANAGEMENT

rare patients with refractory disease may benefit from plasmapheresis during pregnancy

MANAGEMENT

An increased incidence of anti-thyroid antibodies has been documented, but clinically apparent thyroid dysfunction is uncommon

PROGNOSIS

- Most disease activity spontaneously remits during the weeks to months following delivery, but there are isolated reports of a protracted course postpartum.

- Flares and/or recurrences in association with menstruation are common, and in 25–50% of patients, they may also be induced by oral contraceptives

PROGNOSIS

Some patients experience a prolonged disease duration leading to chronic pemphigoid gestationis(> 6 months)

Some patients are thought to develop bullous pemphigoid

PROGNOSIS

- It is quite likely to recur in subsequent pregnancies, usually with an earlier onset and more severe course.

- “Skipped” pregnancies have been observed in 5–8% of women.

PROGNOSIS

There seems to be an increased risk of prematurity and small-for-gestational age neonates, presumably due to chronic placental insufficiency. Recently, it was shown that this risk correlates with disease severity, i.e. occurrence of blistering and early onset, and not with the use of systemic corticosteroids.

PROGNOSIS

Approximately 10% of newborns develop mild skin involvement due to passive transfer of maternal antibodies and this resolves spontaneously within days to weeks

THANK YOU