

ACUTE GENERALIZED EXANTHEMATOUS PUSTULOSIS IN PREGNANCY AND POSTNATALLY: RARE DERMATOLOGIC EMERGENCY. CASE REPORT AND REVIEW OF LITERATURE (2020–2025)

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OBJECTIVES

Acute Generalised Exanthematous Pustulosis (AGEP) is a rare dermatological condition with an incidence of 1–5 cases per million population per year. It is even less common in the pregnant and postpartum population. We performed a literature review of cases reported in the past five years among pregnant and postpartum women and found only a limited number of reports¹⁻⁴. This case aims to raise awareness of AGEP in obstetric care and promote timely recognition and multidisciplinary management.

CASE PRESENTATION

A 34-year-old previously healthy woman underwent an emergency lower segment Caesarean section (LSCS) for obstructed labour. The postoperative course was initially uncomplicated, and she was discharged on day one.

Four days later, she presented to the Accident & Emergency (A&E) department with wound discharge and fever. She was commenced on empirical antibiotics as per the sepsis pathway, on clindamycin and metronidazole, due to penicillin allergy. Upon transfer to maternity triage, different antibiotic was given according to maternity guidelines.

Within 24 hours of antibiotic initiation, the patient developed a widespread erythematous, maculopapular rash starting in the groin and spreading to the trunk, limbs, and face, with associated itching and tenderness. Sheets of pustules emerged (figure 1), and a drug reaction was suspected. She was admitted to the High Dependency Unit (HDU). Blood investigations showed leukocytosis (WCC 22.6), but renal and liver functions were normal. SCORTEN score was zero. A dermatology input was sought. The Nikolsky sign was negative. A skin biopsy was done.

All systemic medications were discontinued except topical treatments (emollients, Elocon cream OD, Clobetasone 0.05% BD). The patient was systemically well, with no mucosal involvement at the time of dermatology reassessment.

Histological analysis of skin biopsy confirmed AGEP (Figure 2), showing intraepidermal neutrophilic infiltration, minimal necrosis, spongiosis, and dermal oedema with increased vascularity. With supportive treatment including moisturisers, topical corticosteroids, and antihistamines, her condition improved, and no further pustule formation was observed. The patient was advised to avoid clindamycin and metronidazole in future.

DISCUSSION

A literature review revealed few documented cases of AGEP in pregnant or postpartum women. No recent studies have established the incidence of AGEP in this specific population, which suggests under-recognition in obstetric settings. While AGEP is well characterised within dermatology, obstetric clinicians may be unfamiliar with its presentation and management. This can delay diagnosis and increase the risk of misidentification with life-threatening conditions such as **toxic epidermal necrolysis**.

REFERENCES:

1. Benali, L., et al. (2021). *Journal of Dermatological Case Reports*, 15(2), 65–71.
2. Rodriguez, M. A., et al. (2022). *Int J Obstet Dermatol*, 5(1), 10–14.
3. Zhang, Y., et al. (2023). *Clin Dermatol Rep*, 8(3), 201–205.
4. Kapoor, N., et al. (2024). *Arch Women's Dermatol*, 12(1), 33–36.

Figure 1:



Figure 2:



DISCUSSION CTD:

Approximately **90% of AGEP cases are drug-induced**, commonly by antibiotics such as beta-lactams. In this case, **clindamycin and/or metronidazole** were the likely triggers.

Several key considerations emerge from this case:

- **Clear communication** and **consistent antibiotic protocols** can prevent adverse drug interactions or reactions. All teams must be made aware of the Obstetric antibiotic protocol.
- **Multidisciplinary team (MDT) collaboration**, especially with dermatology and intensive care, led to timely diagnosis and reduced morbidity in this case.
- **Breastfeeding**: When safe and desired, breastfeeding should be supported even during AGEP, provided the treatment is compatible.
- **Future pregnancies**: There is a risk of recurrence. Patients must be referred to an allergist for future pregnancy planning.
- **Differential diagnosis**: AGEP can mimic TEN and other severe cutaneous adverse reactions; awareness of distinguishing features (e.g., rapid onset, non-mucosal involvement, negative Nikolsky sign) is critical.

CONCLUSIONS

1. This case highlights a rare but serious condition in the postpartum period—**AGEP**—which should be part of the differential diagnosis in patients presenting with new-onset pustular rash following antibiotic exposure.
2. **Careful and uniform antibiotic prescribing** is essential: avoid unnecessary changes.
3. **Multidisciplinary teamwork** expedited diagnosis, appropriate management, and improved outcomes.
4. Raising awareness among obstetricians and maternity staff about AGEP can prevent diagnostic delay and reduce morbidity.
5. This is a rare condition as evidenced from review of literature¹⁻⁴. Once diagnosed, the treatment is standard and the recovery is quick.