

# Acquired perforating dermatosis – a case beyond Obstetric

## Dermatose perfurante adquirida – um caso para além da Obstetrícia

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### Abstract

Acquired perforating dermatosis is a rare skin disease associated with conditions such as diabetes mellitus, renal failure and chronic arterial hypertension. The authors present the case of a pregnant woman with numerous skin lesions and a diagnosis of untreated diabetes and chronic arterial hypertension.

**Keywords:** Acquired perforating dermatosis; Diabetes mellitus; Chronic arterial hypertension; Pregnancy.

### Resumo

A dermatose perfurante adquirida é uma doença cutânea rara, que se associa a condições como diabetes mellitus, insuficiência renal e hipertensão arterial crónica. Os autores apresentam o caso de uma grávida com inúmeras lesões cutâneas e o diagnóstico de diabetes e hipertensão arterial crónica não tratada.

**Palavras-chave:** Dermatose perfurante adquirida; Diabetes mellitus; Hipertensão arterial crónica; Gravidez.

### INTRODUCTION

Acquired perforating dermatosis is a rare skin disease characterized by the transepidermal elimination of various materials such as collagen, elastin or keratin<sup>1</sup>. This dermatological condition is associated with multiple conditions, the most frequent being diabetes mellitus, renal failure and chronic arterial hypertension<sup>2</sup>. It is a self-limiting but recurrent process.

Clinically, the lesions present as plaques, papules and umbilicated nodules with a keratotic centre, often associated with xeroderma. The most common symptoms are pruritus (72.7%) and pain (9.1%)<sup>3</sup>. Diagnosis is clinical and histopathological and treatment is mainly aimed at symptom management<sup>4</sup>.

### CASE REPORT

A 42-year-old woman from Guinea, gravida 2 para 0 (previous foetal death before 24 weeks), with an unmonitored 19-week pregnancy and a medical history of type 2 diabetes mellitus and chronic arterial hypertension, without regular medication or previous surgeries, presented to the obstetric emergency department. She reported experiencing intense pain in the right hallux and severe pruritus in the upper and lower limbs since the beginning of pregnancy, associated with multiple skin lesions. (Figure 1 and 2) She denied obstetric complaints.

On physical examination, an ulcerated lesion of approximately 3 centimetres was observed at the distal end of the right hallux, without signs of infection. On the back, forearms, and lower limbs, excoriation marks were observed, along with papule-keratotic and papule-erosive lesions. Obstetric evaluation revealed an

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**FIGURE 1.** Skin lesions of lower limb.



**FIGURE 2.** Skin lesions of upper limb.

18-week foetus with good vitality, but a shortened cervix measuring 8 millimetres, leading to the decision to admit the patient to the obstetric department. Initial laboratory tests showed haemoglobin of 8.3 g/dL, creatinine of 1.6 mg/dL and glycated haemoglobin of 7.2%. Other tests were unremarkable, with negative serologies and virologies.

During hospitalization, she experienced glycaemic and blood pressure instability, requiring the initiation of insulin therapy and antihypertensive treatment. Internal medicine evaluation led to the diagnoses of diabetic retinopathy, diabetic neuropathy and chronic kidney disease in the context of diabetic nephropathy. The dermatology team performed a biopsy of the skin lesions and prescribed an emollient combined with a topical antibiotic and corticosteroid (a mixture of Fucidine® and betamethasone in equal parts). The histopathological study confirmed the diagnosis of perforating dermatosis and the prescribed treatment resulted in the regression of most lesions in about 10 days.

At 20 weeks and 2 days, a morphological ultrasound revealed a hypoplastic nasal bone, with no other associated abnormalities. Amniocentesis was proposed to the patient, which she accepted, and the result confirmed a fetus with karyotype XX +21.

At 22 weeks of gestation, the patient experienced premature rupture of membranes, followed by the spontaneous onset of labor and fetal expulsion on the same day. She was discharged with follow-up for hospital consultations and informed about future obstetric risks.

This case report highlights a rare dermatological condition in pregnancy, which can have a significant psychosocial impact on affected women. Its prevalence may show an increasing trend due to the growing number of foreign pregnant women with unmonitored pregnancies and multiple undiagnosed and uncontrolled conditions who seek care at Portuguese hospitals.

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## AUTHOR'S CONTRIBUTION

Rita Dunkel has contributed substantially to the collection of data, writing of the manuscript and final approval of the version to be published. Sara Costa and Helena Nascimento have contributed substantially to the critical review of the manuscript and final approval of the version to be published.

## DECLARATIONS OF INTEREST

The authors have no conflicts of interest to declare.

## INFORMED CONSENT

Patient consent for publication was obtained.

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