



## BRIEF REPORT

# Unusual Course of Acne Conglobata as a Skin Manifestation due to Bilateral Luteoma of Pregnancy

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Dear Editor:

Pregnancy luteoma (PL) is a type of rare ovarian tumor which can be hormonally active with the production of androgens. Cutaneous PL manifestations include acne, greasy skin and facial hair growth. According to the literature, some of the maternal changes associated with virilization due to PL are reversible, including acne and male-pattern hair loss<sup>1</sup>. There are no previous records of management of acute lesions in acne conglobata secondary to PL that did not resolve spontaneously following the labor. We present a case of a 28-year-old patient referred to our outpatient clinic of Dermatology and Venereology Department from Gynecological Endocrinology Department with acne conglobata presenting with comedones, nodules, purulent cysts and confluent infiltrates. The first lesions developed rapidly in the latter period of pregnancy (20th weeks of gestation). The patient experienced the onset of virilization presented severe acne lesions on the face, back, neckline and upper extremities, deepening of the voice and abdominal hirsutism (Fig. 1). We received the patient's consent form about publishing all photographic materials.

Due to the diagnosis of bilateral PL the pregnancy was ter-

minated with the cesarean section at the 37th week of gestation. Per-operatively, resection of the right ovary was performed with partial resection of the left ovary. Histopathological examination confirmed PL. A healthy female infant weighing 2,300 g was born two months prior to the visit to our clinic.

Maternal testosterone concentrations were reduced in the first month after delivery but the clinical virilization symptoms did not disappear. Laboratory findings one month after delivery revealed normal concentrations of testosterone 0.39 ng/ml (0.14~0.53 ng/ml), dehydroepiandrosterone sulphate (DHEA-SO<sub>4</sub>) 7.06 μmol/L (2.6~13.9 μmol/L), androstenedione 2,1 ng/ml (0.3~3.5).

The patient was initially treated with doxycycline 200 mg/d for 14 days with no clinical improvement. Further treatment included isotretinoin 40 mg/d for 7 months and prednisone with a decreasing dose of 30 mg/d for 2 months with a rapid improvement of skin lesions leading to full recovery. Importantly, the treatment also resulted in a significant reduction of newly formed scars (Fig. 2). The patient has been followed up for 7 months without a relapse. During control examination 18 months after the labor, the laboratory tests were within normal ranges: testosterone 0.21 ng/ml (0.14~0.53 ng/ml), DHEA-SO<sub>4</sub> 2.7 μmol/L (2.6~13.9 μmol/L), androstenedione 1.98 ng/ml (0.3~3.3 ng/ml).

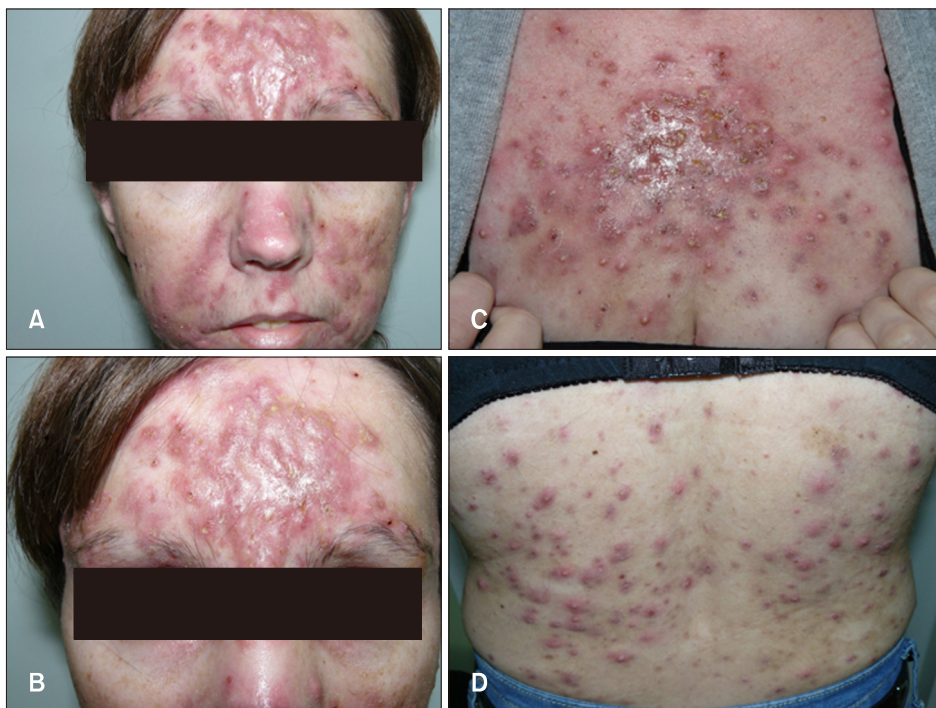
Manifestations of hyperandrogenism in PL patients are usually not long-lasting and usually resolve spontaneously either after the pregnancy or tumor resection<sup>2</sup>. Approximately 25% to 60% of women with PL have androgen hypersecretion<sup>2,3</sup>. Androgen concentrations should normalize in approximately 2 weeks, while clinical symptoms should resolve 3 months after labor or tumor resection<sup>4</sup>. In our case severe acne conglobata lesions persisted three months after delivery. Diagnosis of PL is established on ul-

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**Fig. 1.** Acne conglobata lesions with pronounced scarring on the face (A, B) and on the trunk (C, D) which appeared and rapidly progressed in the second/third trimester of the pregnancy.



**Fig. 2.** (A~D) Resolution of the lesions after the treatment.

trasounds and pathologic examination. Our clinical observations suggest that in case of rapidly progressing acne conglobata secondary to PL, an early introduction of combined isotretinoin and prednisone therapy is crucial for successful resolution of the skin lesions and prevention of scar formation.

### **CONFLICTS OF INTEREST**

The authors have nothing to disclose.

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