### Case Report

## IMPETIGO HERPETIFORMIS IN A 36 WEEK PREGNANT WOMAN

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#### **ABSTRACT**

A case of impetigo herpetiformis seen in a 36 week pregnant woman is presented and relevant literature is reviewed.

**Key Words:** Impetigo herpetiformis, Pregnancy

#### INTRODUCTION

Impetigo Herpetiformis (IH) is a dermatologic disease consisting of pustules on an erythematous base covering large areas of skin. While some researchers accept IH as a type of pustular psoriasis, others accept IH to be solely a pregancy-related disease (1,2). IH was first described by Von Hebra in 1872. The disease is seen mainly in the third trimester of pregnancy, but there are rare cases appearing in the first and second trimesters as well (3,4). There is resolution of the disease between pregnancies, but recurrences with subsequent pregnancies may be expected (5). Hypocalcemia and hipoparathyroidism are usually present (4).

Our aim in this paper is to present a case of impetigo herpetiformis seen in a 36 week pregnant woman and to scrutinize relevant literature.

#### **CASE REPORT**

A 36 week pregnant 32 year-old white woman (gravida 5, para 2, abortion 2) presented with pustules on an erythematous base. The gynecologic history of the patient was quite normal. Her history revealed nothing but a thyroid operation 12 years previously.

In her physical examination her blood pressure was measured to be 120/80 mmHg, pulse rate 105 per min, temperature 37°C. There were pustules on an

erythematous base on both deltoids, external earways, on her nose, neck, abdomen, groin and legs (Fig. 1). The mucous membranes were not involved. The thyroid was symmetrically large and tender with palpation. Chvostek and Trousseau signs were positive.

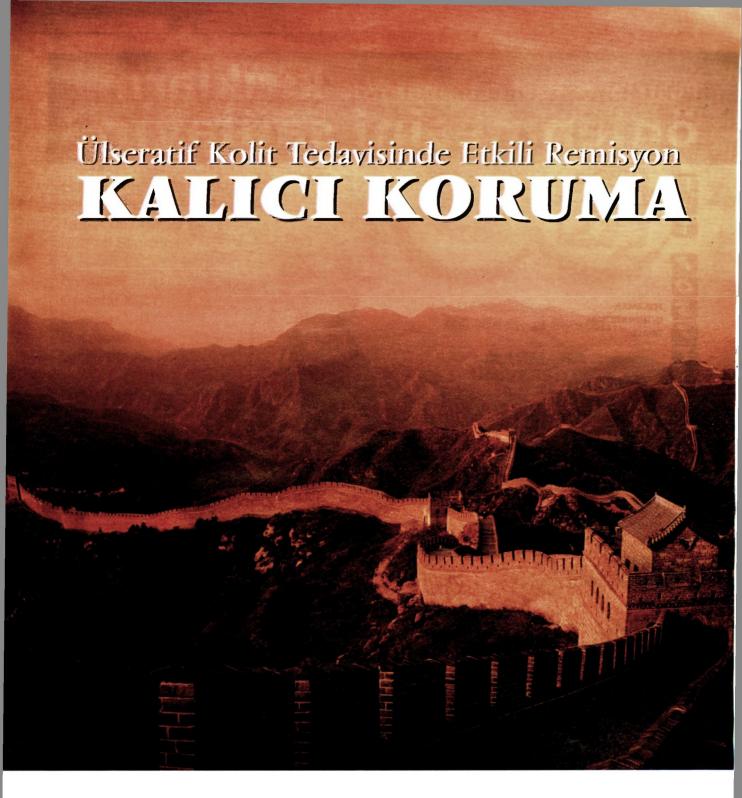
In obstetrical examination the collum was dilated 3 cm with 30-40% effacement. The size of the uterus corresponded to 35-36 weeks of pregnancy. The pouch was present and fetal cardiac activity was positive. The patient had infrequent contractions.

In obstetrical ultrasonographic examination the BPD and FL corresponded to 36 weeks of pregnancy. The placenta was located posteriorly with thickness of 7 cm (placental edema). In Doppler evaluation of the umbilical artery the A/B proportion was within the normal range (2.3).

Laboratory investigations showed an elevated white blood count (14,300 WBC/mm³) and erytrocyte sedimentation rate (78/90 mm in 30 minutes and 1 hour). Serum calcium was low (3.2 mg/dl) and phosphorus elevated (6.1 mg/dl). The total protein and albumin levels were also low (5.9 g/dl and 3.2 g/dl, consequetively). Hepatic and renal function tests were slightly elevated. The serum trigliserid and alkaline phosphatase levels were markedly high (400 mg/dl and 498 IU/L, consequetively). Thyroid function tests and other laboratory investigations were within the normal range. Electrocardiogramme revealed QT lengthening.

The throat culture revealed normal flora of the throat and cultures from the pustules were sterile.

The histo-pathologic examination of punch biopsies of the pustules showed spongioform pustules filled with eosinophils and neutrophils located immediately under the parakeratotic stratum corneum. The dermis showed perivascular mononuclear cell infiltration.







# Postmenopozal osteoporozda KIRIKIARIN önlenmesini sağlayın.



FRACTURE INTERVENTION

INTERNATIONAL



HIZLI

İlk kırık insidansını %44 oranında azaltmıstır (p=0,001).2

Vertebra dışı kırık insidansını bir yıl içinde %47 oranında azaltmıştır (p=0,021).2



Kalça kırığı oluşma insidansını %51 oranında ve diğer kritik osteoporoz bölgelerinde kırık insidansını önemli derecede azaltmıştır (p=0,047).1

#### GÜNDE BİR KEZ 10 MG FOSAMAX OLARAK REÇETELEYİNİZ.

Kontrendikasyonlar, uyarılar, önlemler ve yan etkiler ile ilgili detaylı bilgiler için lütfen prospektüse başvurunuz.



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alendronat sodyum

**FOSAMAX** TRIALS









REFERANSLAR

1. Black DM et al for the Fracture Intervention Trial Research Group Randomised trial of effect of alendronate on risk of fracture in women with existing vertebral fractures.

Lancet 1996; 348: 1535-1541 2. Data on file, MSD Türkiye.

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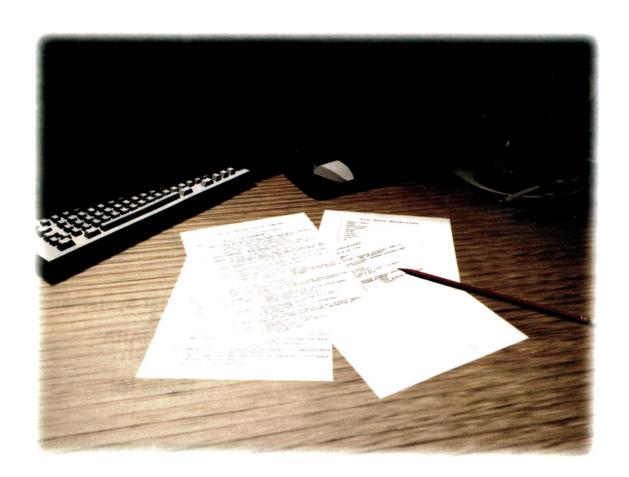
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Sir kitabın yaşadığı bütün aşamaları beraber gerçekleştirebiliriz...

Bize daktilo sayfalarıyla gelmeniz yeterli.

Xitap ve süreli yayınlarda

# Kurtiş Matbaacılık.



Fig.1: Impetigo herpetiformis before treatment

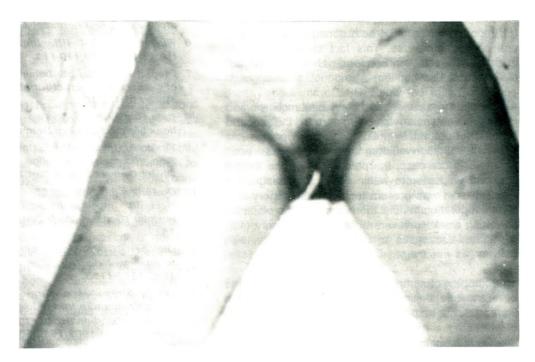


Fig.2: Impetigo herpetiformis after treatment

The patient was hospitalized, and vital functions were monitorized. Calcium gluconate was administered intravenously and local applications of eau de goulard and corticosteroids were applied after consultations from the Internal Medicine and Dermatology Departments. Profilactic antibiotics were administered. After 3 days of intravenous calcium administration, the blood calcium value was elevated to 5.1 mg/dl. Urine

output was 900 cc in 24 hours. The patient gave birth to a 2500 g baby girl with Apgar score 8/10 on the same day with normal delivery after induction of labour. The neonate was evaluated to be normal after physical examination and routine laboratory studies. After intravenous infusion of calcium for 4 days postpartum, calcium 1000 mg tab. and Rocaltrol 0.25 mg cap. per oral 4 times a day was administered.

After delivery, eruptions cleared rapidly, and after desquamation the skin appeared normal on the seventh day of delivery (Fig. 2). Recurrences of IH are reported after oral contraceptive use (6,7), therefore an intrauterine contraceptive device was applied on the 9th day after delivery.

#### DISCUSSION

It is very difficult to understand the etiology of this disease which presents with white sterile pustules appearing on an erythematous base, because it is seen so rarely. Researchers are investigating the relation of IH with estrogen-progesterone, Vitamin D metabolism, autoimmunity and genetic factors (4,6,8,9).

In a paper published in England in 1989, cases of IH seen in two sisters during their first pregnancy have been reported. The fact that they had identical HLA antigens (A11, AW24, BW44, BW54, DR64) suggests autoimmunity in the etiology (8).

In 1982 Oumeish et al (7) in 1988 Winzer and Wolff (6), reported cases of IH both during pregnancy and oral contraceptive use. This fact shows that there might be a relation between IH and estrogen-progesterone use.

A case of IH in a patient with congenital rachitism and recessive ichtyosis with IH seen in the second trimester of pregnancy presenting after hypocalsemia due to termination of drug therapy (4), has been reported. In our case, the parathormone and thyroid hormone values were within the normal range, but hypocalsemia was present together with history of a thyroid operation. While there are reports of cases persisting weeks or even months after delivery (10), there are also cases of immediate resolution with delivery, as was the case with our patient.

The complex of symptoms has an unfortunate name because it is neither related to bacterial infection (impetigo), nor herpes virus infection.

Impetigo herpetiformis is a rare, severe dermatologic disorder which occurs predominantly in the last trimester of pregnancy. About 355 cases have been reported to date in Europe and the United States (2,9,11-15). Impetigo herpetiformis tends to worsen as the pregnancy progresses and is associated with severe maternal and fetal complications. The reason for increased fetal mortality is not clear: it may be related to disturbances of maternal circulation or to placental insufficiency (14). Prompt diagnosis with

appropriate treatment can result in a quick resolution, as in our case. It should always be kept in mind that misdiagnosis or delay in treatment may result in severe maternal and fetal complications.

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