

Diclofenac sodium Induced Nicolau Syndrome

Diklofenak Sodyuma Bağlı Nicolau Sendromu

Engin Şenel¹, Aynure Öztekin¹, Ümran Muslu²

¹Hitit University Faculty of Medicine Department of Dermatology, Çorum, Turkey

²Hitit University Faculty of Medicine Department of Plastic, Reconstructive and Aesthetic Surgery, Çorum, Turkey

ABSTRACT

Nicolau syndrome (NS) also known as livedo-like dermatitis, is an uncommon but important cutaneous drug reaction. It was first described in 1924 and since then many patients have been reported in the literature. The disorder is characterized by intense pain in the injection site and followed by a livedoid reticular patch or indurated plaque. In some patients, this condition may progress into extensive necrosis of the skin and ulceration as seen in our patient. Herein we presented a 52-year-old man and presented with a painful, large ulcer on his left buttock after intramuscular diclofenac sodium administration and diagnosed with NS to draw attention of physicians to this rare and preventable condition.

Key Words: Diclofenac, Nicolau syndrome, livedo-like dermatitis

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ÖZET

Livedo-benzeri dermatit olarak da bilinen Nicolau sendromu (NS), nadir fakat önemli bir kutanöz ilaç reaksiyonudur. İlk kez 1924 yılında tanımlanmış ve o zamandan beri literatürde pek çok hasta bildirilmiştir. Hastalık, enjeksiyon bölgesinde şiddetli ağrı ve bunu takiben bir livedoid retiküler yama veya endüre plak gelişimi ile karakterizedir. Bazı hastalarda, bu durum, hastamızda görüldüğü gibi, derinin geniş çapta nekrozuna ve ülserasyona ilerleyebilir. Olgu raporumuzda, bu nadir görülen ve önlenebilir duruma hekimlerin dikkatini çekmek için intramüsküler diklofenak sodyum enjeksiyonu sonrası sol kalçasında ağrılı, büyük bir ülser gelişen 52 yaşındaki bir erkek hastayı sunduk.

Anahtar Sözcükler: Diklofenak, Nicolau sendromu, livedo-benzeri dermatit

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ORCID IDs: E.Ş. 0000-0001-8098-1686, A.Ö.0000-0002-3669-6631, Ü.M.0000-0003-0403-7217

Address for Correspondence / Yazışma Adresi: Engin Şenel, MD Hitit Üniversitesi Tıp Fakültesi, Deri ve Zührevi Hastalıklar Anabilim Dalı, 19040, Çorum, Türkiye E-mail: enginsenel@enginsenel.com

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INTRODUCTION

Nicolau syndrome (NS) also known as embolia cutis medicamentosa or livedo-like dermatitis is a rare cutaneous drug reaction with severe pain occurring at the site of an intramuscular drug injection. Although the pathogenesis of NS was suggested to be due to accidental intra-arterial injections, it has not been exactly clarified yet (1).

CASE REPORT

A 52-year-old man presented with a painful, large ulcer on his left buttock. He had been given an intramuscular diclofenac sodium injection for myalgia a week ago. General examination of the patient was normal, and his past medical history was unremarkable. Laboratory tests of the patient revealed only a slight elevation in erythrocyte sedimentation rate (32 mm/hr). In physical examination 11x17 cm indurated violaceous plaque with necrotic crusted ulcer was observed on the upper outer quadrant of his left buttock (Figure 1). The patient did not benefit from a two-week conservative treatment including local debridement of necrotic crust, topical mupirocin ointment and dressings and the defect was closed with split-thickness skin graft by plastic surgery clinic.



Figure 1. Large violaceous plaque with necrotic crusted ulcer

DISCUSSION

Nicolau syndrome was first described in the patients treated with bismuth salts for syphilis. Although Freudenthal reported first case of this disorder in 1924, the name of the disease was coined from a case report by Nicolau in 1925 (2). Nicolau suggested the term "livedoid dermatitis" for this condition (3). Administration of a wide range of drugs such as penicillin, local anesthetics, non-steroidal anti-inflammatory drugs and corticosteroids have been reported to cause this condition (1). The condition is characterized by intense pain in the injection site and followed by a livedoid reticular patch or indurated plaque. In some patients, this condition may progress into extensive necrosis of the skin and ulceration as seen in our patient (1). There is no specific treatment for NS. Conservative treatments such as dressing, and analgesics may be beneficial for limited cases. Cold application to relieve the pain is not recommended since it may increase local vasospasm and aggravate the condition (1). Following crucial precautions should be taken by healthcare personnel: Injection should be applied only in the upper outer quadrant; medication more than 5 ml should never be injected at once and aspirating the needle before injection should be performed to make sure that no blood vessel is hit.

Conflict of interest

No conflict of interest was declared by the authors.

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