OLGU SUNUMU CASE REPORT

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Unilateral Segmental Fixed Drug Eruption Induced by Sertraline: Case Report

Sertraline Bağlı Unilateral Segmental Fiks İlaç Reaksiyonu

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ABSTRACT Fixed drug eruption (FDE) is a common dermatological disease, and its etiological mechanism is currently uncertain. FDE may occurs in both sexes and in all age groups. It develops after intake of a responsible drug and always occurs at the same sites. FDE usually appears as a solitary or a small number of pruritic, well circumscribed, erythematous macules that evolve into edematous plaques. Sertraline is a selective serotonin reuptake inhibitor and commonly used drug for depression. Some dermatologic side effects such as rash, pruritus, dermatitis, purpura, urticaria, and Steven-Johnson syndrome were reported in the literature. We present a case of segmental FDE following use of sertraline for depression in a 25-year-old man. Given the wide use of this substance in psychiatry , clinicians should be aware of this potential complication.

Keywords: Herpes zoster; drug eruptions; sertraline

ÖZET Fiks ilaç erüpsiyonu (FIE), sık görülen altta yatan patogenezi tam olarak bilinmeyen dermatolojik bir rahatsızlıktır ve her iki cinste ve her yaştan hastada meydana gelebilir. FIE, neden olan ilaç alımından sonra aynı yerlerde oluşmaktadır. Genelikle ödematöz plaklara dönüşen keskin sınırlı tek veya az sayıda kaşıntılı eritematöz maküller olarak ortaya çıkar. Sertralin, sıklıkla depresyon için kullanılan seçici serotonin geri alım inhibitörüdür. Literatürde sertraline bağlı kızarıklık, kaşıntı, dermatit, purpura, ürtiker ve Steven-Johnson sendrom gibi dermatolojik yan etkiler bildirilmiştir. Biz burada depresyon için sertralin kullanan ardından segmental FIE gelişen 25 yaşındaki bir hastayı sunmaktayız. Psikiyatrideki yaygın kullanımından dolayı klinisyenler, bu potansiyel komplikasyonun farkında olmalılardır.

Anahtar Kelimeler: Herpes zoster; ilaç erüpsiyonları; sertralin

Sertraline is a specific serotonin reuptake inhibitor antidepressant, which is uncommonly associated with adverse cutaneous drug reactions such as rash, pruritus, dermatitis, purpura, urticaria, and rarely, Steven-Johnson syndrome.[1] There may be some unpredictable adverse drug reactions which were not reported in the literature. Here we report a patient diagnosed with depression who developed zosteriform pattern skin rash after treatment with sertraline 50 mg/day.

CASE REPORT

In November 2014, a 25-year-old male was admitted with a 2-day history of multiple, sharply demarcated slightly painful and pruritic papules that

appeared unilaterally over the left side of his abdomen extending from the umblicus anteriorly to the left lumbovertebral region (L5-S1 dermatomes) conforming with a zosteriform pattern. The patient was diagnosed as herpes zoster and valacyclovir 1g three times per day and topical dexpanthenol 5% cream for 1 week were prescribed for the patient. Three days later, the patient applied to our outpatient clinic again due to alteration of skin lesions. In dermatological examination, it was detected that multipl papules enlarged and became confluent to form dark centered plaques (Figure1). In patient history, we could not find any reason such as lumbar trauma, application of topical cream or oral agents to change skin manifestations. Since targetoid like lesions were seen in dermatological examination, skin punch biopsy was performed to confirm the diagnosis of drug eruption. Cutaneous biopsy taken from the lumbar region was examined with H&E slides. Irregular acanthosis, rare dyskeratotic cells, focal hydropic degeneration of the basal layer and exostosis was seen in the epidermis. In dermis vessel proliferation with endothelial swelling and perivascular dense infiltrate of lymphocytes, histiocytes, and sparse eosinophils some emerging into the wall of vessels, and extravasated red blood cells were seen. These findings were consistent with FDE (Figure 2). In detailed anamnesis, the patient admitted that he had used 50mg sertraline per day nearly three weeks for depression. The eruption was considered to be due to the sertraline. And with these histological and clinical findings, the diagnosis of unilateral segmental FDE was concluded. Treatment with a topical corticosteroid cream and withdrawal of the suspected drug led to a rapid resolution of the eruption without residual dyschromia in 2 weeks.

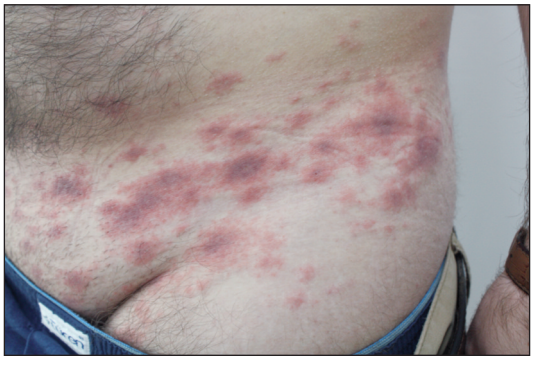

FIGURE 1: Dark centered plaques extending from the umblicus anteriorly to the left lumbovertebral region.

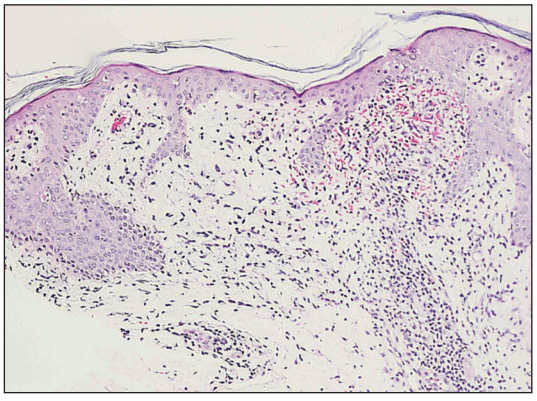

FIGURE 2: Interface dermatitis, monocytic perivascular infiltrate (Haematoxylin and eosin original X 100).

DISCUSSION

Here, we report a case of drug-related eruption presenting with an unilateral segmental distribution. Various infections, neurofibromatosis, dermatitis herpetiformis, scleroderma or drug eruptions may also display a segmental pattern. Segmental FDE with unilateral location is extremely rare (Table 1).[2-5] As far we know, this is the first segmental FDE report related with sertraline.

In recent years, some authors stated that the term "zosteriform" or "dermatomal" when applied to such cases, is a misnomer that should be jettisoned. Two types of skin mosaicism are currently recognized with regard to monogenic skin disorders (i.e., type 1, segments of heterozygous skin in the setting of nonmutant skin, and type 2, segments of homozygous skin in the setting of heterozygous skin). The terms suggested as equivalents of type 1 and type 2 are "isolated" (segmental lesions as the sole manifestation of a dermatosis) and "superimposed" (segmental lesions coexisting with nonsegmental, otherwise typical manifestations of a dermatosis), respectively.[6] Accordingly, segmental drug reaction in our case was consistent with type 1.

The term FDE describes the development of one or more annular or oval erythematous patches

TABLE 1: Drugs inducing segmental fixed drug eruption.

References	Drugs	Gender	Age (year)	Localization	Type of skin mosaicism
Nahum MS. et al.	Cephazolin	Male	59	Left lower limb	2
Ozkaya E. et al.	Trimetoprim	Male	25	Right upper limb	1
Coskun B. et al.	Calcium acetate	Male	45	Right upper limb	1
Vetrichevvel TP. et al.	Levofloxacin	Male	38	Left chest	2

as a result of systemic exposure to a drug.[7] The mechanism by which FDE develops is not well known. It has been claimed in some studies that it is caused by adhesion molecule 1 released from keratinocytes of the lesion after drug administration. Additionally, FDE patients have been shown to have reduced regulatory T cell counts and were found to have HLA-B22. Therefore, it has been suggested that there might be genetic transmission. These reactions normally resolve with hyperpigmentation and may recur at the same site with re-exposure to the drug.[2] Careful history taking about drug intake and a prior history of recurrent lesions in the same sites are essential for the precise diagnosis of FDE. Systemic oral challenge and topical provocation tests are usually performed to identify the drug responsible for the FDE.[8] In our case, it was the first episode of FDE. And the lesion healed without residual hyperpigmentation. Patch test and a challenge with sertraline could not be done as the patient refused it. The patient was followed for the second FDE attack. Sertraline related lupus erythematosus, acute generalised exanthematous pustulosis and bullous reaction were reported in the literature, however sertraline related unilateral segmental fixed drug eruption was not reported in the literature.[9-11]

Cutaneous manifestations of segmental drug eruptions may be misdiagnosed as herpes zoster and those patients may be received herpes zoster treatment firstly. If cutaneous findings alter in patients diagnosed as herpes zoster, segmental drug eruptions may also be kept in mind.

Conflict of Interest

Authors declared no conflict of interest or financial support.

Authorship Contributions

Writing, discussing, Finding Sourcesof the Article: *Ali Balevi;* ***Idea, Design, Analysis, Writing:*** *Pelin Doğa Üstüner;* ***Critical Review:*** *Mustafa Özdemir, Aslı Çakır Erdoğan.*

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