Urticarial lesions associated with the use of paroxetine: a case report
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ABSTRACT
Paroxetine is an antidepressant included in the group of selective serotonin reuptake inhibitors (SSRI) with antidepressant and anxiolytic properties. A rarely seen adverse effect of paroxetine is dermatological reactions. Commonly seen reactions to paroxetine are eczematous reactions and benign skin lesions in general, while some clinical pictures such as life-threatening Stevens–Johnson syndrome and toxic epidermal necrolysis can also be seen. A case of a female patient who developed urticaria during paroxetine use is discussed in this paper.

Introduction
Urticaria is a condition with lesions in the skin that are erythematous, generally itching and protuberant from the surface and disappear in a short time and demonstrate histopathologically dermal edema [1]. It may be acute or chronic. Acute urticaria may develop with food and drug ingestion. The most commonly encountered drugs that are related with development of acute urticaria are antimicrobials (penicillin and sulphonamides), analgesics and anti-inflammatory drugs (acetysalicylic acid, NSAIDs, and opiates), ACE inhibitors and blood products [2]. It may also be seen during use of antidepressants and antipsychotics, mainly with mood regulators among the psychotropic drugs. The rate of dermatological side effects associated with Selective Serotonin Reuptake Inhibitors (SSRI) that is the group of most commonly used antidepressants has been reported to be 11.4% [3]. Among the SSRIs, the most frequent dermatological side effects are seen with the use of fluoxetine and paroxetine. Urticaria, photosensitivity, alopecia, Stevens–Johnson syndrome, toxic epidermal necrolysis, vasculitis, erythema multi-forme, acneiform lesion, and hirsutism have been reported in patients using paroxetine [4].

A case of a female patient who developed urticaria when using paroxetine is discussed in this paper.

Case
The patient was 25 years old, single and was a college student. She had applied to the outpatient clinic with unwillingness, unhappiness, insomnia, being unable to study her lessons, unable to concentrate, and lack of appetite present in the last 3 months. Her past medical history revealed that she had lived in some stressful conditions two years ago, and subsequently had similar complaints. She was started on medications and frequent drug changes were made due to side effects and had used many antidepressants, names of which she did not remember and had no mental complaints until the last 3 months. There was no psychiatric disease in the family history. Hamilton Depression Scale (HDS) applied to the patient yielded 25 points. She was started on paroxetine 10 mg/day due to the DSM-5 [5] diagnosis of “Major Depressive Disorder” and the dose was recommended to be increased to 20 mg/day after a week. She presented to the dermatology outpatient clinic with slightly itching and erythematous lesions raised from the surface of the skin, starting from the left forearm and spreading to the shoulder that started to appear on the third day of her paroxetine use in a dose of 10 mg/day.

The clinical picture was diagnosed to be “acute urticaria due to drugs” since the results of blood tests ordered by the dermatology clinic were found to be in the normal ranges and the lesions started to appear following drug use in addition to the properties of the lesions and she was recommended to stop paroxetine use. Subsequently, her lesions healed in three days. The patient presented to this clinic because her mental complaints were continuing. She did not remember the drugs she had used previously. Vortioxetine 5 mg/day was started to avoid cross sensitivity a week after she stopped taking paroxetine. The dose was increased to 10 mg/day after a week. During the weekly visits after vortioxetine use, no dermatological side effects were observed secondary to the drug she started to use. HDS was measured to be 12 at the 1-month follow-up visit.
Discussion

Paroxetine is an antidepressant with antidepressant and anxiolytic properties included in the group of SSRI. It strongly inhibits the reuptake of serotonin through synaptic space and is used in the treatment of many psychiatric disorders including major depressive disorder, obsessive compulsive disorder, panic disorder, and post-traumatic stress disorder [6].

The most common adverse effects seen during the use of paroxetine are nausea, somnolence, oscilation, dry mouth, lack of appetite, nervousness, sweating, constipation, and ejaculation disorder [7].

A rarely seen side effect of paroxetine is dermatological reactions. In a placebo controlled study, sertraline caused skin reactions in 3%, while paroxetine caused skin reactions in 2%, similar to the rate seen in placebo. Dermatological side effects are dose-independent [8].

Although skin lesions in benign nature such as eczematous reactions and urticaria are seen secondary to paroxetine use, rarely life-threatening dermatological disorders may also be seen [9].

The following cases are among the samples of the most serious dermatological findings: a case of a 16-year-old girl with erythematous pustules on the arm and face starting on the 12th day of paroxetine use in a dose of 20 mg/day and spreading into the whole body [10], and another case of a 20-year-old female patient with cutaneous vasculitis that developed in the 6th week of paroxetine treatment in a dose of 20 mg/day [11].

Skin reactions are mostly seen in women, elderly, black, multi-drug users, and individuals with serious medical diseases [12]. Urticarial lesions were developed in the case presented here although the patient was in a young age and had no multi-drug use and no history of accompanying physical disease.

The mechanism of development of the dermatological side effects seen in paroxetine use is unknown fully, although two probabilities are emphasised in the etiology of the dermatological side effects seen with the use of SSRI’s. One of them is that it appears secondary to increased serotonin concentration in the blood of the individuals with hypersensitivity and the other opinion is that it might be associated with increased serotnergic activity in the dermal and epidermal space rather than hypersensitivity [13].

Urticarial lesions mostly last less than 24 hours but appearance of new lesions may continue for a while. Life would be threatened if mucosal angioedema accompanies the picture and hospitalization might be required. Therefore, the drug should be stopped immediately in urticarial reactions and the drug should be replaced with another medication which is not in the same chemical group [14]. Urticarial lesions alone were present in the case presented here and no life-threatening clinical picture such as angioedema accompanied the lesions. Lesions regressed after the cessation of the drug.

Warnock et al. reported a 20 year-old male patient who had maculopapular rash during paroxetine use. Paroxetine treatment was stopped and sertraline was started instead; however, maculopapular type rash was seen again in similar regions of the body during sertraline use as well [15]. In another case, sertraline was stopped and paroxetine treatment was begun after the lesions completely healed in a 39-year-old patient who had maculopapular and erythematous rash with the use of sertraline. Rashes, similar in nature were seen in the same regions of the body on the fourth day of paroxetine use. Although they are two SSRI’s having different molecular properties, the cross sensitivity between these two drugs might have caused this. Therefore, it was recommended that suspicion of dermatological side effects should especially be questioned during drug conversions between the drugs in the same group [16]. Since the patient presented here had used many antidepressant drugs that she could not recall the names two years ago during her illness, as a new treatment option, in order to avoid cross-sensitivity, vortiotexine was preferred since it belonged to a different drug group that was released to the market in this country. No similar side effects were observed during frequent follow-up visits while the patient was on vortiotexine.

The most frequently affected organ is skin during drug reactions and they are the skin findings that aid in the diagnosis. In those cases, first of all, the drugs used should be stopped; the necessary clinical and laboratory tests should be performed; the use of same drugs in the past should be questioned; other causes that might result in similar rashes should be excluded and finally especially the probability of cross sensitivity should be kept in mind when starting a new treatment. Before starting psychotropic drugs, the patient should be informed of the possible dermatological side effects and should be followed-up frequently after the start of the treatment for possible dermatological reactions.

Disclosure statement

No potential conflict of interest was reported by the author.

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