

Urticaria Due to Etanercept in a Patient with Psoriatic Arthritis

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Abstract: A 50-year-old woman was referred to our emergency room because of urticaria. Eleven days after etanercept therapy was started, the patient developed an urticarial rash of the trunk and face. A diagnosis of generalized urticaria was made. Etanercept treatment was suspended. Treatment was started with methylprednisolone and dexchlorpheniramine. The patient's condition improved and she was discharged. In this case, the most probable cause of urticaria was considered to be etanercept because of the temporal relationship between exposure to the drug and the onset of symptoms. The adverse reaction could be considered probable. Although the overall risk of skin adverse events associated with etanercept appears low, clinicians should be aware of this reaction.

Key Words: adverse drug reaction, etanercept, psoriatic arthritis, tumor necrosis factor, urticaria

Etanercept significantly improves joint and skin conditions, lessens disability due to joint damage, and improves the quality of life in patients with moderately to severely active psoriatic arthritis (PsA).¹ The most common side effects associated with etanercept have been injection site reactions, headaches, and mild upper respiratory tract symptoms.²⁻⁴ Skin reactions to this biologic drug are rare. We present a case of severe urticaria in a patient with PsA receiving treatment with etanercept.

Case Report

A 50-year-old woman with no significant previous medical or surgical history and no medications presented with urticaria and dermatitis. One year before admission, she was diagnosed with PsA. One month prior to this presentation, she began receiving 50 mg of etanercept subcutaneously once weekly. Eleven days after etanercept therapy was started, she developed sudden onset of very severe pruritus in the back and arms, accompanied by a slight burning sensation and general malaise with no other associated symptoms. The pruritus spread to the rest of the trunk and to the junctions of the limbs. Multiple erythematous, diffuse, macular, papular, and urticarial pruritic rashes were evident on the trunk, limbs, and face—especially on the ears, some of which showed a central clearing. Apart from finding generalized cutaneous lesions, the physical examination was unremarkable. A diagnosis of generalized urticaria was made.

In order to find possible causes of urticaria, the patient underwent several laboratory examinations, which were all within normal limits. We suspected that the causative agent was etanercept because this was the only

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Key Points

- Severe urticaria was possibly induced by etanercept.
- Although the overall risk of skin adverse events associated with the use of etanercept appears low, clinicians should be aware of this reaction.
- During the treatment, patients need to be aware of signs and symptoms of cutaneous reactions so they can seek attention as soon as possible.
- Clinicians who use etanercept are routinely urged to maintain a vigilant awareness for the rarer reactions such as the one reported here.

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drug added before the condition appeared. Furthermore, after starting therapy with etanercept, the patient had not consumed other new drugs, over-the-counter medications, herbal products, and had not modified her dietary or life habits. Consequently, etanercept was suspended. Treatment was started with intravenous methylprednisolone hemisuccinate (60 mg every 12 hours) and dexchlorpheniramine (6 mg every 8 hours). The patient's condition improved with this therapy and she was discharged. The medication on discharge was 30 mg per day of oral prednisone for one week (which was then tapered to discontinuation over the next two weeks), 10 mg per day of ebastine, and 20 mg per day of oral omeprazole. The patient was followed up in the outpatients' clinic 15 days later and was asymptomatic.

Discussion

A variety of skin rashes have been reported in controlled trials of etanercept.^{5,6} Most of them have been mild and only one reported case had a grade 3 rash (generalized symptomatic maculopapular or vesicular). However, a wide variety of skin lesions have been reported as potential adverse reactions to etanercept, such as lichenoid reaction,¹¹ leukocytoclastic vasculitis,¹² and even severe skin reactions such as erythema multiforme,¹³ Stevens-Johnson syndrome, and toxic epidermal necrolysis.¹⁴ Our case illustrates a generalized urticaria induced by etanercept. A search of Medline (1966–2008) was conducted to evaluate the published literature on etanercept-induced urticaria. Reference lists from relevant papers were used to identify additional articles. This search strategy revealed two cases that suggested an association between urticaria and etanercept therapy. Skyttä et al¹⁵ reported that two patients developed an urticaria-like rash with prurigo appearing bilaterally on the extensor surfaces of the elbows subsequent to etanercept injections.

In the case we present, the urticaria was most likely caused by etanercept for several reasons: there was a correlation between the time course of the reaction and the administration of etanercept; etanercept was the only drug

administered before the urticaria developed; and the symptoms rapidly resolved after etanercept was discontinued. In accordance with the data obtained and based on the Naranjo algorithm, the adverse reaction could be considered probable.¹⁶

In summary, the reported case of urticaria in a patient undergoing etanercept points to the need for a higher index of suspicion of adverse cutaneous reactions in PsA patients treated with anti-TNF- α drugs. Although the overall risk of skin adverse events associated with the use of etanercept appears low, clinicians should be aware of this reaction.

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