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Case Report
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Erythema Nodosum as a Reactive Vasculitis, Induced by Letrozole the Rapyin a Patient with Hormone - Sensitive Breast Cancer

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Abstract

Introduction: Erythema nodosum is an acute, nodular vasculitis that is usually limited to the extensor aspects of the lower legs. Presumably, it is a hypersensitivity reaction and may occur in association with several systemic diseases or drug therapies. Letrozole, an aromatase inhibitor, is a commonly used drug to treat hormone-sensitive breast cancer. There have been a few cases of aromatase inhibitor induced vasculitis.

Presentation of Case: We report the case of a 73-years old woman with relapsing erythema nodosuma few weeks after start of treatment with Letrozole, because of hormone-sensitive breast cancer. The patient was presented with painful erythematous nodules located on the lower limbs and reactive synovitisof theankles. We excluded systemic autoimmune disease, sarcoidosis or tuberculosis; evaluated ANA-antibodies/negative, urine analysis/negative/chest X-ray/normal, TB-spot/negative.

Discussion: We accepted that erythema nodosum is associated with the letrozole therapy. It was stopped and we started systemic corticosteroids. After 2 months there were no more erythema nodosum manifestations and we tapered the steroid dose.

Conclusion: There are few cases of necrotizing or leucocytoclasticvasculitis induced by aromatase inhibitors. Letrozoleis often used drug for treatment of hormone-sensitive breast cancer, so with this case we would like to report this side effect of Letrozole as rare cause for erythema nodosum.

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Introduction

Erythema Nodosum (EN) is an acute, nodular, erythematous eruption that usually is limited to the extensor aspects of the lower legs. Chronic or recurrent erythema nodosum is rare but may occur. Erythema nodosum is presumed to be a hypersensitivity reaction and may occur in association with several systemic diseases/Hodgkin disease and lymphoma, Sarcoidosis, Inflammatory bowel disease, Systemic diseases of the connective tissue etc., tuberculosis, non-specific bacterial and fungal infections, drug therapies/sulfonamides, gold and sulfonylurea's, oral contraceptive pills/, or it may be idiopathic. Currently, the most common cause of erythema nodosum is streptococcal infection in children and adults and sarcoidosis in adults. Numerous other causes have been reported.

Letrozole is approved for the treatment of local or metastatic breast cancer that is hormone receptor positive or has unknown receptor status in postmenopausal women. There have been a few cases of aromatize inhibitor induced vasculitis (Jhaveri K et al. [1], Santoro S et al. [2], Digklia et al. [3], Pathmarajah P et al. [4]).

Presentation of the Case

A 73-years old woman was admitted to rheumatology department with relapsing erythema nodosum a few weeks after start of treatment with Letrozole, because of hormone-sensitive breast cancer. In April 2017 she was diagnosed with Breast cancer has been operated. After the surgery in August 2017 she started a Letrozol therapy. A few weeks later, she got an abrupt onset of erythema nodosum (Figure 1 and 2).

In the Clinic of Rheumatology, the patient presented with painful erythematous nodules located on the lower limbs and reactive synovitis of the ankles. We observed blood pressure normal/125/80 mmHg/. Her blood examinations showed mild inflammatory reaction - CRP 22, normal range

Figure 1: Patient Letroole Lungs.

Figure 2: Patient Letrozole EN.

<5, anaemia-Hbg 116, normal range 120-160, white blood cells, differential leukocyte count, as well as biochemistry were normal. Antinuclear antibodies, C3 and C4 components of the complement were normal. Chest x-ray was normal. Quantitative analysis for proteinuria and T-SPOT TB were negative. We started 20 mg Methylprednisoloni.v. Simultaneously with PPI. A few days later she had no longer reactive synovitis and the noduls became smaller and less painful. Renal function also improved.

Discussion

During hospitalization we excluded systemic autoimmune disease, sarcoidosis or tuberculosis because of absence of characteristic clinical picture and negative lab data for the above mentioned diseases (ANA-antibodies - negative, urine analysis- negative, chest X-ray-normal, T-spot TB-negative. We concluded that erythema nodosum was associated with the letrozole therapy. The medicine was stopped and we started systemic corticosteroids. One month after dehospitalization there was no relapse of erythema nodosum manifestations and we started tapering of corticosteroid dose. The patient will be followed up for a longer period of time in order to figure out more relapses of erythema nodosum after discontinuation of Letrozole.

Conclusion

There are few cases from the literature with necrotizing or leucocytoclastic vasculitis induced by aromatizes inhibitors. Letrozole is often used drug for treatment of hormone-sensitive breast cancer. With this case we point out this side effect of Letrozole as a causative drug among others inducing erythema nodosum.

References

1. Jhaveri K, Halperin P, Shin SJ. Erythema nodosum secondary to aromatase inhibitor use in breast cancer patients: case reports and review of the literature. Breast Cancer Res Treat. 2007;106(3):315.
2. Santoro S, Santini M, Pepe C, Tognetti E, Cortelazzi C, Ficarelli E, et al. Aromataseinhibitor-induced skin adverse reactions: Exemestane-related cutaneous vasculitis. J Eur Dermatol Venereol. 2011;25(5):596-8.
3. Digklia A, Tzika E, Voutsadakis IA. Cutaneous leukocytoclastic vasculitis associated with letrozole. J Oncol Pharm Pract. 2014;20(2):146-8.
4. Pathmarajah P, Shah K, Taghipour K, Ramachandra S, Thorat MA, Chaudhry Z, et al. Letrozole-induced necrotizing leukocytoclastic small vessel vasculitis: First report of a case in the UK. Int J Surg Case Rep. 2015;16:77-80.