

Depression in A Patient Treated With Isotretinoin for Acne Vulgaris: A Case Report

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Citation: Pratiksha Shankarlal Nathani. *Depression in A Patient Treated With Isotretinoin for Acne Vulgaris: A Case Report. Int Clinc Med Case Rep Jour.* 2023;2(9):1-2.

Received Date: 16 March, 2023; **Accepted Date:** 20 March, 2023; **Published Date:** 22 March, 2023

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INTRODUCTION

Acne vulgaris is a common skin condition that affects millions of people worldwide, particularly adolescents and young adults. Isotretinoin, a vitamin A derivative, is an extremely effective acne treatment. However, using it has a number of potential negative effects, including the possibility of depression. While the link between isotretinoin and depression is still not fully understood, several case reports and studies have reported a possible association between the two. This case report presents a case of depression as a side effect of isotretinoin in a patient with acne vulgaris. The aim of this case report is to highlight the importance of early recognition and management of depression in patients receiving isotretinoin therapy, as it can significantly impact their overall well-being and treatment outcome.

Keywords: Isotretinoin; Depression; Acne vulgaris

CASE

A 24-year-old female with severe acne vulgaris was started on isotretinoin at a dose of 10 mg/day which was increased to 20 mg/day after two weeks followed by 40mg/ day in the following four weeks. Two months after starting treatment, the patient began to experience symptoms of depression, including low mood, loss of interest in activities, and decreased appetite. These symptoms persisted and worsened over the next four weeks, prompting the patient to seek medical attention. There was no known psychiatric or medical family history. Upon examination, the patient had a depressed mood and decreased energy. The patient had been treated for severe cystic acne once before on a four-month medication on 40mg/day isotretinoin one year ago. Isotretinoin was discontinued, and the patient was started on desvenlafaxine 50 mg/day and clonazepam 0.5mg/day. Within four weeks of discontinuing isotretinoin and starting antidepressant therapy, the patient's depressive symptoms improved significantly.

Discussion

Isotretinoin is a highly effective medication for severe acne. However, its use is associated with a number of potential side effects, including depression. The link between isotretinoin and depression is not fully understood, but

several case reports and studies have reported a possible association between the two ^[1,2]

The mechanism by which isotretinoin may cause depression is not fully understood. Some studies suggest that isotretinoin may affect the levels of neurotransmitters, such as serotonin, in the brain ^[3]. Other studies have suggested that isotretinoin may cause changes in brain function and structure that may lead to depression ^[4].

The incidence of depression as a side effect of isotretinoin is not well established. Azoulay et. al reported the first controlled study to identify an isotretinoin-depression link with statistical significance in which the relative risk for those exposed to isotretinoin was 2.68 (95% CI = 1.10 to 6.48) ^[5]. It is important to note that some of these studies have methodological limitations, such as small sample sizes, and may not provide a representative estimate of the incidence of depression.

The case given here illustrates the possibility of isotretinoin causing depression in acne vulgaris patients. Depression as a side effect of isotretinoin should be considered in patients with acne who develop depressive symptoms during treatment. In such cases, isotretinoin should be discontinued, and the patient should be closely monitored for the resolution of depressive symptoms.

Healthcare professionals should be aware of this potential side effect and keep a close eye out for patients who start to exhibit depressed symptoms. Depression is a serious issue that has to be diagnosed and treated. In patients with acne who are at increased risk of depression, such as those with a history of depression or a family history of depression, close monitoring and counseling regarding the risks and benefits of isotretinoin treatment should be considered.

CONCLUSION

The case presented here highlights the potential for isotretinoin to cause depression in patients with acne vulgaris. Depression as a side effect of isotretinoin should be considered in patients with acne who develop depressive symptoms during treatment. In such cases, isotretinoin should be discontinued, and the patient should be closely monitored for the resolution of depressive symptoms.

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