

Case study

Isotretinoin and depression: more than skin deep?

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Introduction

Isotretinoin is a vitamin A derivative and a retinoid receptor agonist, which is widely used in the treatment of acne. The growing number of reported cases of depression and suicide associated with its use has prompted concern amongst prescribers, users and their relatives. It ranks in the top 10 of the US Food and Drug Administration's database of drugs associated with reports of depression and suicide attempts;^{1–3} however it has received scant attention in the psychiatric literature, and a causal link has yet to be established.² Factors that support a possible association between isotretinoin and depression are a temporal association between use of the drug and depression, positive dechallenges (often with psychiatric treatment), and positive rechallenges.³

Case history

A 33-year-old single employed male was referred for assessment to our service with a six-week history of depressed mood and anxiety. He described biological symptoms of depression, such as diurnal mood variation, early morning wakening, loss of appetite, weight loss, poor concentration, and anergia. He was anhedonic with loss of interest in his normal social activities, and described pronounced feelings of hopelessness, and active suicidal ideation. The only psychosocial stressors present were impending examinations relating to his profession; however he had undergone similar examinations in the past without any concomitant difficulties. He had no

past psychiatric history, though there was a strong positive family history of suicide; his father and brother had both committed suicide.

In his past medical history, he had been treated with isotretinoin for his acne three months earlier. This was discontinued two weeks prior to completion of the complete course of treatment, as a result of elevated bilirubin. He had been provided with information regarding the possible link between depression and isotretinoin by the prescribing dermatologist, and had researched the topic himself on the internet. Until his admission to hospital, he had not been aware of his father's suicide, and discovered this by chance when he read the general practitioner (GP) referral letter. His GP was not aware that he had been commenced on isotretinoin treatment, some months earlier.

Admission to hospital was indicated on the basis of prominent suicidal ideation, and agitation noted at interview. He was commenced on citalopram, to which he responded quickly, with stabilisation of his symptoms of affective illness, and he was discharged two weeks later, with outpatient follow-up.

Conclusion

Isotretinoin revolutionised the treatment of severe nodulocystic acne when it was introduced in 1982 in the US. In practice today its use has expanded to treat less-severe acne, which has been unresponsive to conventional treatments.⁴ While improvement

of acne may reduce associated psychological damage,^{4,5} this needs to be weighed against the evidence suggesting a relationship between isotretinoin and depression. Patients and relatives need to be fully informed, and symptoms of affective illness should be actively assessed at each review, particularly in light of a family history of affective illness and/or suicide.¹ Screening instruments such as the Beck Depression Inventory may be useful in clinical settings,⁵ particularly as patients are less likely to present their depressive symptoms to dermatologists. Prompt referral to psychiatric care and commencement on appropriate treatment, including consideration of isotretinoin discontinuation should be considered if depressive illness is suspected. Communication with patients' GPs is also very important, as they are best placed to possess full knowledge of an individual's personal or familial psychiatric history.

The patient's consent was obtained for publication of this case report.

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