World Academy of Science, Engineering and Technology International Journal of Pharmacological and Pharmaceutical Sciences Vol:15, No:06, 2021

Isotretinoin and Psychiatric Adverse Events: A Review of the Evidence

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Abstract: Isotretinoin is a widely used therapeutic for the treatment of acne vulgaris and various other skin disorders. However, since its approval, many side effects and contraindications have been described, particularly important, such as teratogenicity as well as liver disease and dermal deterioration. In a very important allegation, isotretinoin has been linked with psychiatric symptoms like depression, suicidal ideation, schizophrenia, and hypervitaminosis A syndrome characteristics. These adverse effects have raised significant concerns regarding the safety of isotretinoin. Numerous studies and research have associated isotretinoin with side effects on the mental health of patients and have proposed plausible mechanisms regarding this suspected causative relationship. However, the evidence is still contradicting, and the data disperse, making their validity less valuable. Thus, in the present study, we aim to analyze further the available literature and present a complete analysis of the side effects of isotretinoin, with particular emphasis on the effects it may have on the mental health of patients. The review is based on international articles from broad scientific electronic databases like PubMed and Scopus. This review concludes that although many studies have associated isotretinoin with mental effects like depression, bipolar disorder, schizophrenia, and suicidal ideation, the data are still insufficient and often contradictory. In fact, additional studies with accurate data and larger double-blinded samples, and more analytic systematic reviews are required. It is especially important to monitor the dose and the intervals that isotretinoin has to be administered in order to potentially cause mental health problems, as well as the duration of treatment and the role that the patient's medical and pharmaceutical history may play.

Keywords: acne, depression, isotretinoin, mental health

Conference Title: ICPPH 2021: International Conference on Clinical Pharmacology, Pharmacy and Hemotherapy

Conference Location : Barcelona, Spain **Conference Dates :** June 10-11, 2021