



PHOTOBIOLOGY AND PHOTOPROTECTION

TRICYCLIC ANTIDEPRESSANTS INDUCED THREE CLINICALLY DIFFERENT PHOTOSENSITIVE REACTIONS, A CASE REPORT AND SYSTEMATIC REVIEW AND ANALYSIS

Einapak Amnattrakul⁽¹⁾ - Mia Steyn⁽¹⁾ - William Rickaby⁽²⁾ - John P Mcfadden⁽¹⁾ - Robert P. E. Sarkany⁽¹⁾ - Adam Fityan⁽¹⁾

St John's Institute Of Dermatology, Photobiology Unit, St John's Institute Of Dermatology, Guy's And St Thomas' Nhs Foundation Trust, London, United Kingdom⁽¹⁾ - Guy's And St Thomas' Nhs Foundation Trust, Dermatopathology Department, Guy's And St Thomas' Nhs Foundation Trust, London, United Kingdom⁽²⁾

Introduction: Tricyclic antidepressants (TCAs) are commonly prescribed worldwide. The common antimuscarinic side effects of these medications are well recognised, but many physicians remain unaware of the potential for TCAs-induced photosensitivity (TIPs) and thus can lead to a delayed diagnosis or misdiagnosis.

Objective: To better define the different clinical presentations of TIPs in order to aid recognition and management.

Materials and Methods: We carried out a qualitative systematic review of TIPs using MEDLINE, EMBASE, LILACS, Cochrane sources. The review was registered in PROSPERO, CRD42018107338

Results: The 21 studies included described a total of 25 patients who were diagnosed as having either “photosensitivity disorder” or “hyperpigmentation” due to tricyclic antidepressants. The detailed analysis revealed three clinically different TIPs. Photo-distributed hyperpigmentation (‘TIPs 1’) was most commonly reported (88%), characterised by gradual development of exposed site hyperpigmentation in the absence of prior inflammation. This mainly affected females (mean age 55 years). Imipramine was the most common agent reported (81%), with the average onset of the eruption occurring after 10 years of use. The reaction completely resolved after drug discontinuation with the mean time of 10 months. A photo-distributed drug exanthema-like eruption (‘TIPs 2’) was reported in 2 patients (8%). and persisted after eight days of drug discontinuation in one. and was associated with systemic features in the other. The final presentation was of a photo-distributed eczematous eruption ‘TIPs 3’ (4%) and was supported by a positive photopatch test to the TCA in question.





Conclusions: Our review has identified three clinically different presentations of TIPs. We hope that this detailed analysis and classification of TIPs covering the distinct clinical presentations and resolution characteristics will enable physicians in all specialties to more quickly identify, treat and reassure patients with TIPs in their varying clinical practices.

