ADVERSE DRUG REACTIONS, INCLUDING SJS, TEN

VITILIGO-LIKE DEPIGMENTATION IN NON-MELANOMA ONCOLOGY PATIENTS TREATED WITH IMMUNOTHERAPY

R Liu [1] - S Chou [2] - P Fernandez-peñas [1]

Westmead Hospital, Department Of Dermatology, Sydney, Australia [1] - Westmead Hospital, Tissue Pathology And Diagnostic Oncology, Sydney, Australia [2]

Introduction: Approximately 2-11% of patients with melanoma treated with ipilimumab (an anti-CTLA4 antibody) and 8-24% of patients with melanoma treated with anti-PD1 antibodies develop vitiligo-like depigmentation (VLD). Several studies have reported a possible association between the development of VLD and survival benefit for both anti-CTLA-4 and anti-PD1 therapy. This stems from theories that VLD is an expansion of the anti-melanoma effect of immunotherapy.

Objective: To explore the prevalence of VLD in patients with non-melanoma solid tumours.

Materials and Methods: We prospectively reviewed all patients receiving immunotherapy (anti-PD1 therapy, anti-CTLA4 therapy, or combination anti-PD1 and anti-CTLA4 therapy) for non-melanoma tumours from January 2015 to June 2017 at Westmead Hospital, Sydney Australia.

Results: We present three cases of VLD in non-melanoma oncology patients treated with anti-PD1 therapy – namely, for renal cell carcinoma, cholangiocarcinoma and squamous cell lung cancer. These are the first reported cases of VLD occurring in patients treated with immunotherapy for each of these respective cancer types. A patient agreed to reflective confocal microscopy and incisional biopsy of an effected lesion, which demonstrated a loss of melanocytes within lesional skin, with no interface dermatitis – compatible with stable vitiligo.

Conclusions: It is thought that overexpression of melanocytic antigens in melanoma cells and their subsequent release after tumour destruction induced by immunotherapy explained the breakdown of normal melanocytes. A review of the literature reveals 2 additional cases of denovo VLD occurring in non-melanoma patients treated with anti-PD1 therapy (for acute myeloid leukemia and lung adenocarcinoma respectively). These cases therefore suggest there may be other mechanisms involved in this phenomenon, separate from a melanoma specific effect.