J Clin Exp Dermatol Res 2017, 8:3 (Suppl)
DOI:10.4172/2155-9554-C1-057

16th European Dermatology Congress

June 07-08, 2017 Milan, Italy

Hyperpigmentation disorders and update on skin lightening agents

Marta I Rendon
Rendon Center for Dermatology and Aesthetic Medicine, USA

Hyperpigmentation is a descriptive umbrella term for many skin conditions, which has both internal and external etiologies. Endogenous causes can include melasma, ochronosis, stasis dermatitis, and others, while exogenous causes encompass light exposure resulting in lentigines, drug-induced pigmentation, and post-inflammatory pigmentation secondary to any external cause such as acne, trauma, chemical peels, and laser therapy, amongst others. There are numerous treatment options ranging from topical, injectable, and systemic agents to medical devices. While certain treatment modalities are typically more successful than others, hyperpigmentation in general has traditionally been a challenging condition to treat. Benefits must always be weighed against their corresponding risks, and patient compliance with sun/light protection is paramount. Important factors to consider when treating these conditions will be discussed, including patient selection, genetic background, and prior treatment options. Post-inflammatory hyperpigmentation can occur after treatment with several of the available methods.

martarendon@yahoo.com

Blood based biomarkers for diagnosis, prognosis and monitoring of patients with melanoma

Mel Ziman[1], Pauline Zaenker[1], Michael Millward[2], Tarek Menaiwy[2], Adnan Khattak[3], Rob Pearce[1], Anna Reid[1], Michelle Pereira[1], James Freeman[1] and **Elin Gray[1]**
[1]Edith Cowan University, Australia
[2]Sir Charles Gairdner Hospital, Perth Australia
[3]Fiona Stanley Hospital, Perth Australia

Current methods of melanoma diagnosis and prognosis are at times problematic and limited to observation of tumor tissue by histology or imaging. The analysis of blood based, tumor specific products including autoantibodies, circulating tumor DNA (ctDNA) and circulating tumor cells (CTCs), now provides early rapid, accurate and quantitative measurements of tumor presence and/or burden. In our studies, we utilized protein arrays, mutation-specific droplet digital PCR and microfluidic devices to measure autoantibodies, mutant tumor DNA (ctDNA) and circulating tumor cells (CTCs), respectively, in patients with very early to advanced stage metastatic melanoma. Autoantibodies were detected in very early stage patients (n=150) at significantly higher concentrations than those in healthy controls (n=150). A diagnostic combination of 10 autoantibodies has been identified that can be utilized as an accompaniment to current clinical measures. For metastatic melanoma we utilized ctDNA and CTCs to detect and monitor tumour burden during treatment of patients with targeted therapies (n=47) and/or immunotherapies (n=48). CTCs and/or ctDNA were detected in 70% to 80% of samples prior to treatment. Levels of ctDNA and CTCs decreased in response to therapies, prior to, or concurrently with radiographic response. Moreover, patients with no, or low, levels of ctDNA and CTCs at baseline had significantly longer PFS. In addition, CTC subtypes, including those positive for PDL1, predicted response. In conclusion, our studies demonstrate the utility of blood based liquid biopsies to assist with diagnosis, prognosis and monitoring of melanoma patients.

m.ziman@ecu.edu.au