



2021 Annual Spring Abstract Submission

Vitiligo, not an Inside Job

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A 52 year old man with no significant past medical history presents with 6 months history of gradually expanding light spots on his cheeks and chin. Regarding his skin care routine, he uses a non-medicated cleanser to wash his face twice a day. He dyes his beard every 2-4 weeks. There is no personal or family history of autoimmune disease. Physical examination reveals multiple depigmented macules of the perioral skin. Periocular skin, lips and fingertips were without abnormalities. The patient did not respond to topical triamcinolone, but saw improvement with discontinuation of beard hair dye confirming the diagnosis of chemical induced vitiligo (CIV) due to use of paraphenylenediamine (PPD)-containing beard dye. Vitiligo is a common, dermatologic condition characterized by formation of depigmented macules and loss of melanocyte function. CIV purportedly develops after exposure to common household products or occupational chemicals resulting in depigmentation in unsuspecting individuals [1,2]. Proposed pathogenesis includes exposure to phenols, which are analogs of melanin's amino acid precursor tyrosine, integration of these analogs into melanogenesis, development of toxic metabolites, and autoimmune dysfunction [2]. Repeat exposure to PPD-containing dye has been previously reported to result in development of CIV resulting in disrupted melanogenesis [2]. Vitiligo can have a profound effect on patients' quality of life with depression and social phobia affecting more than 50% of patients [3,4]. Given these findings of CIV development in a patient with repeat use of PPD-containing dye, this case demonstrates the need to consider CIV in patients who present with new onset depigmentation.

References:

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Photos from initial visit:

