

LETTER TO THE EDITOR

VOL. 10, NO. 6 • JUNE 2017 • JCADONLINE.COM

Topical Anti-Estrogen Therapy To Treat Melasma

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J Clin Aesthet Dermatol. 2017;10(6):16

DEAR EDITOR:

I read with interest the recent report by Snyder et al¹ describing melasma associated with the application of a topical estrogen cream. The development of melasma is multifactorial and female sex hormones have been implicated in the pathogenesis of this condition.² Estrogen receptor expression is increased in melasma lesions.³ Also, melanogenesis of cultured human melanocytes can be stimulated by estrogens and inhibited by estrogen antagonists.⁴

The induction of melasma with a topical estrogen raises the possibility that the treatment of this condition could be facilitated

by the use of a topical anti-estrogen. I recently proposed a novel topical approach for the treatment of melasma that utilized an anti-estrogen, such as a selective estrogen receptor modulator (tamoxifen or raloxifene) or an aromatase inhibitor (anastrozole or tetrozole or exemestane).⁵ The topical agent would also include a vascular endothelial growth factor inhibitor (bevacizumab) that would be directed toward blocking the angiogenesis component of melasma pathogenesis.⁵ Investigation of this novel—topically administered—therapy for melasma is warranted.

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