

Nasal Tanning Sprays: Illuminating the Risks of a Popular TikTok Trend

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PRACTICE POINTS

- Although tanning beds are arguably the most common and dangerous method used by patients to tan their skin, dermatologists should be aware of the other means by which patients may artificially increase skin pigmentation and the risks imposed by undertaking such practices.
- We challenge dermatologists to note the influence of social media on tanning trends and consider creating a platform on these mediums to combat misinformation and promote sun safety and skin health.
- We encourage dermatologists to diligently stay informed about the popular societal trends related to the skin such as the use of nasal tanning products (eg, melanotan I and II) and be proactive in discussing their risks with patients as deemed appropriate.

Nasal tanning spray is a recent phenomenon that has been gaining popularity among consumers on TikTok and other social media platforms. The active ingredient in the tanning spray is melanotan II—a synthetic analog of α -melanocyte-stimulating hormone,^{1,2} a naturally occurring hormone responsible for skin pigmentation. α -Melanocyte-stimulating hormone is a derivative of the precursor proopiomelanocortin, an agonist on the melanocortin-1 receptor that promotes formation of eumelanin.^{1,3} Eumelanin then provides pigmentation to the skin.³ Apart from its use for tanning, melanotan II

has been reported to increase sexual function and aid in weight loss.¹

Melanotan II is not approved by the US Food and Drug Administration; however, injectable formulations can be obtained illegally on the Internet as well as at some tanning salons and beauty parlors.⁴ Although injectable forms of melanotan II have been used for years to artificially increase skin pigmentation, the newly hyped nasal tanning sprays are drawing the attention of consumers. The synthetic chemical spray is inhaled into the nasal mucosae, where it is readily absorbed into the bloodstream to act on melanocortin receptors throughout the body, thus enhancing skin pigmentation.² Because melanotan II is not approved, there is no guarantee that the product purchased from those sources is pure; therefore, consumers risk inhaling or injecting contaminated chemicals.⁵

In a 2017 study, Kirk and Greenfield⁶ cited self-image as a common concern among participants who expressed a preference for appearing tanned.⁶ Societal influence and standards to which young adults, particularly young women, often are accustomed drive some to take steps to achieve tanned skin, which they view as more attractive and healthier than untanned skin.^{7,8}

Social media consumption is a significant risk factor for developing or exacerbating body dissatisfaction among impressionable teenagers and young adults, who may be less risk averse and therefore choose to embrace trends such as nasal tanning sprays to enhance their appearance, without considering possible consequences. Most young adults, and even teens, are aware of the risks

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Known Adverse Effects of Melanotan II Use^{1,9,10}

Common adverse effects

- Acne
- Facial flushing
- Gastrointestinal tract upset
- Photosensitivity

Rare adverse effects

- Dysplastic nevi
- Melanoma
- Priapism
- Renal infarction

associated with tanning beds, which may propel them to seek out what they perceive as a less-risky tanning alternative such as a tanner delivered via a nasal route, but it is unlikely that this group is fully informed about the possible dangers of nasal tanning sprays.

It is crucial for dermatologists and other clinicians to provide awareness and education about the potential harm of nasal tanning sprays. Along with the general risks of using an unregulated substance, common adverse effects include acne, facial flushing, gastrointestinal tract upset, and sensitivity to sunlight (Table).^{1,9,10} Several case reports have linked melanotan II to cutaneous changes, including dysplastic nevi and even melanoma.¹ Less common complications, such as renal infarction and priapism, also have been observed with melanotan II use.^{9,10}

Even with the known risks involving tanning beds and skin cancer, an analysis by Kream et al¹¹ in 2020 showed that 90% (441/488) of tanning-related videos

on TikTok promoted a positive view of tanning. Of these TikTok videos involving pro-tanning trends, 3% (12/441) were specifically about melanotan II nasal spray, injection, or both, which has only become more popular since this study was published.¹¹

Dermatologists should be aware of the impact that tanning trends, such as nasal tanning spray, can have on all patients and initiate discussions regarding the risks of using these products with patients as appropriate. Alternatives to nasal tanning sprays such as spray-on tans and self-tanning lotions are safer ways for patients to achieve a tanned look without the health risks associated with melanotan II.

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