

**Exfoliation or exposure: The hidden risks of hydroxy acids in skincare**

Muznah Arsalan, Raqib Ali, Syed Azfar Hussain

*Dear Editor,* The rising influence of social media, combined with unrealistic beauty standards set by society, has fuelled the growth of hydroxy acid-based skincare products, particularly among youth striving to achieve what is often referred to as "glass skin." These products are well known for their exfoliating properties, promising smoother, clearer skin.<sup>1</sup> However, considering taking into consideration the recent Food and Drug Administration (FDA) research linking their use to an increased risk of photosensitivity, there is growing recognition of the potential risks of hydroxy acids that have been overlooked by both consumers and cosmetic brands.<sup>2</sup>

Alpha hydroxy acids (AHAs), commonly found in anti-ageing and acne-treatment products, work by removing dead skin cells and promoting skin renewal.<sup>1</sup> However, FDA studies have revealed that AHAs can heighten photosensitivity, making the skin more vulnerable to UV damage.<sup>2</sup> Research has shown that AHA-treated skin has an increased formation of cyclobutene pyrimidine dimers (CPDs)—DNA lesions directly caused by UV radiation exposure.<sup>3</sup> Over time, such DNA damage contributes to premature aging and irritation. Despite these findings, AHAs continue to be widely marketed without adequate warnings about their risks.

The lack of dermatological advice and the sole reliance on influencer and social media recommendations prior to using such products aggravates the issue. According to a 2023 study in the British Journal of Dermatology, 60% of acne patients did not receive any professional skincare advice, while a staggering 77% sought guidance from unverified online sources.<sup>4</sup> Many individuals, unaware of the additive effects of different skincare products and their interactions with each other, tend to apply them excessively, driven by the overconsumption trend promoted by social media. This fosters misconceptions that

more skincare equates to better results, when in reality, excessive use of hydroxy acids can severely damage the skin barrier and increase susceptibility to long-term health risks.

Cosmetic businesses continue to profit from aggressive marketing strategies that highlight short-term benefits while ignoring possible hazards, despite scientific evidence to the contrary. Regulatory bodies should enforce stricter guidelines to ensure that skincare products containing hydroxy-acids include clear warnings about photosensitivity. Moreover, public awareness campaigns that educate consumers on the importance of professional consultation before using acid-based skincare should be initiated by dermatologists and healthcare institutions.

While it is encouraged to take care of one's skin, it should not come at the cost of an individual's health. Hence, though hydroxy-acids may offer visible results, users should be informed of the associated risks and not incorporate them into their skincare routine without dermatologist guidance.

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1st year MBBS Student, Dow University of Health Sciences, Karachi, Pakistan.

**Correspondence:** Syed Azfar Hussain. Email: [azfarhussain766@gmail.com](mailto:azfarhussain766@gmail.com)

ORCID ID: 0009-0003-7433-9146

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