



Comments on Management of Keloid Scars: Noninvasive and Invasive Treatments

Norbert Banhidy¹ Francis Banhidy²

¹Plastic Surgery Department, Royal London Hospital, Barts Health NHS Trust, London, United Kingdom

²Division of Medicine, University College London, London, United Kingdom

Address for correspondence Norbert Banhidy, Royal London Hospital, Whitechapel Rd, London E11FR, United Kingdom (e-mail: norbert.banhidy@nhs.net).

Arch Plast Surg 2023;50:116–117.

We read with great interest the review article titled “Management of keloid scars: noninvasive and invasive treatments.”¹ The author presents a comprehensive review of the available literature on the current management options of keloid scars and the potential therapies that hold promise for the future. The proposed treatment algorithm of the practical guidelines for scar management is especially clinically useful and can hopefully encourage the adoption of a standardized management strategy for keloids around the world.

We would, however, like to expand on the point touched upon by the author regarding the psychological burden caused by keloids and other forms of abnormal scarring, and highlight the need for a greater incorporation of psychosocial therapy into the management of keloids. As the author points out, keloid scars are not only a type of physical and aesthetic impairment but also have psychological and social sequelae, which can further impair patients' quality of life.² No further mention is given in the review to the management of these psychological factors however. Scarring has been shown to be associated with the development of depression and anxiety; feelings of shame and worthlessness. This creates strain in social interactions, resulting in stunted communication, reduced intimacy, and avoidant behaviors.² Despite the clear associations demonstrated between scarring and its impact on mental health, there is currently comparatively little emphasis placed on the management of the psychological aspects of scars versus the physical aspects. This deficiency is likely multifactorial and may be attributed to the lack of awareness and training of plastic surgeons and the wider multidisciplinary team in the recognition and management of psychosocial issues associated

with scarring.² The positive effects of psychological therapy in helping patients overcome the negative psychological effects of visible scarring are well documented. Cognitive behavior therapy (CBT) is effective in supporting patients to come to terms with the visible difference, aids in decision making, and shows to be effective in overcoming social anxiety.³ Additionally, the administration of structured programs incorporating CBT, social interaction training, and anxiety management for patients suffering from visible scars have demonstrated significant improvements in multiple domains of mental health, including general anxiety, depression, satisfaction with life, social anxiety, and appearance-related anxiety.⁴ Specifically designed questionnaires assessing the quality of life of patients with keloid scarring can help in the early identification of patients who are more at risk of negative psychological impact; therefore, they aid in the subsequent triage and management of these patients.⁵ As a result, the future holistic management of scarring must encompass a multidisciplinary approach that considers both its physical and psychological effects.

Author Contributions

Conceptualization: N Banhidy, F Banhidy Writing - original draft: N Banhidy, F Banhidy Writing - review & editing: N Banhidy, F Banhidy.

Conflict of Interest

None declared.

References

- 1 Kim SW. Management of keloid scars: noninvasive and invasive treatments. Arch Plast Surg 2021;48(02):149–157

received

April 29, 2021

accepted after revision

May 1, 2021

DOI <https://doi.org/10.1055/s-0042-1758641>.

10.1055/s-0042-1758641.

eISSN 2234-6171.

© 2023. The Korean Society of Plastic and Reconstructive Surgeons. All rights reserved.

This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial-License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (<https://creativecommons.org/licenses/by-nc-nd/4.0/>)

Thieme Medical Publishers, Inc., 333 Seventh Avenue, 18th Floor, New York, NY 10001, USA

- 2 Ngaage M, Agius M. The psychology of scars: a mini-review. *Psychiatr Danub* 2018;30(Suppl 7):633–638
- 3 Van Loey NEE. Psychological impact of living with scars following burn injury. In: Téot L, Mustoe TA, Middelkoop E, Gauglitz GG, eds. *Textbook on Scar Management: State of the Art Management and Emerging Technologies*. Springer International Publishing; 2020: 429–434
- 4 Kleve L, Rumsey N, Wyn-Williams M, White P. The effectiveness of cognitive-behavioural interventions provided at Outlook: a disfigurement support unit. *J Eval Clin Pract* 2002;8(04): 387–395
- 5 Bock O, Schmid-Ott G, Malewski P, Mrowietz U. Quality of life of patients with keloid and hypertrophic scarring. *Arch Dermatol Res* 2006;297(10):433–438