
Single-handed vampire facial: Combining microneedling with platelet-rich plasma for single-hand use



Vikas Pathania, MD, Bhavni Oberoi, MBBS, Prerna Shankar, MD, and Siddharth Bhatt, MBBS
Pune, India

Key words: acne scars; derma roller; innovation; melasma; microneedling; platelet-rich plasma.

Abbreviation used:

PRP: platelet-rich plasma

CLINICAL CHALLENGE

Microneedling, or collagen induction therapy, is an extremely effective and minimally invasive modality with an ever-growing list of indications, including skin rejuvenation, acne scars, androgenetic alopecia, axillary hyperhidrosis, melasma, periorbital melanosis, and striae distensae, to name a few.¹ Many of these indications have found favor in combination with platelet-rich plasma (PRP). PRP has been used both in the form of intradermal injections into the acne scars followed by microneedling and as a topical application before or after microneedling.² A more popular and minimally invasive method for combination therapy is the simultaneous application of PRP while microneedling is being performed. However, this often requires an assistant or an additional hand to apply PRP while the operating surgeon carries out the microneedling.

SOLUTION

We made a novel modification by attaching a derma roller (microneedling device) to a 5-mL pipette, secured with sterile micropore tape. After PRP was loaded, the distal end of the pipette was cut to a length of up to the barrel of the derma roller to facilitate the application of PRP just past the rolling barrel (Fig 1). The pipette can be simultaneously squeezed with the palm of the hand to release the PRP while the device is rolled over the treatment area (Fig 2). This modification allows single-hand use, thereby eliminating the need for an additional assistant to apply PRP over the treatment area before or after microneedling.

The innovation uses ubiquitously available surgical disposables to enable the single-hand, simultaneous application of PRP during microneedling.

From the Armed Forces Medical College and Command Hospital,
Pune.

Funding sources: None.

Conflicts of interest: None disclosed.

Reprints not available from the authors.

Correspondence to: Vikas Pathania, MD, Armed Forces Medical
College, Pune, Maharashtra, India 411040. E-mail: vikascongo@gmail.com.

J Am Acad Dermatol 2021;84:e77-8.

0190-9622/\$36.00

© 2019 by the American Academy of Dermatology, Inc.

<https://doi.org/10.1016/j.jaad.2019.08.013>

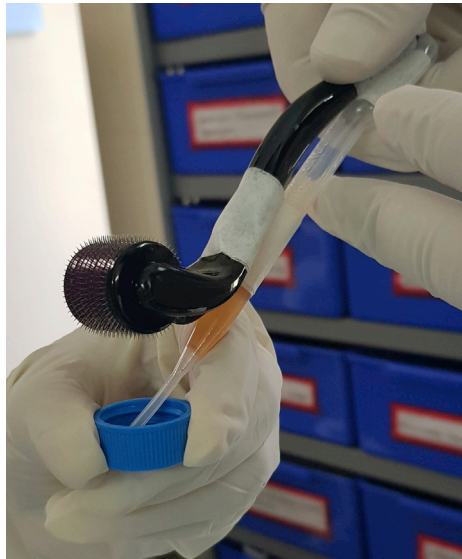


Fig 1. Platelet-rich plasma being loaded into the apparatus, which is assembled with a derma roller, a disposable pipette, and micropore tape.



Fig 2. The apparatus in action, facilitating simultaneous and single-hand application of platelet-rich plasma during microneedling.

REFERENCES

1. Singh A, Yadav S. Microneedling: advances and widening horizons. *Indian Dermatol Online J.* 2016;7(4):244-254.
2. Porwal S, Chahar Y, Singh P. A comparative study of combined derma roller and platelet-rich plasma versus derma roller alone in acne scars and assessment of quality of life before and after treatment. *Indian J Dermatol.* 2018;63(5):403-408.