



# Application of cyanoacrylate to achieve hemostasis in elderly patients with inflamed, friable, and fragile skin receiving anticoagulation therapy after dermatologic surgery

Sonal Muzumdar, BS,<sup>a</sup> and Hao Feng, MD, MHS<sup>b</sup>  
*Farmington, Connecticut*

**Key words:** cyanoacrylate; dermatologic surgery; hemostasis.

## CLINICAL CHALLENGE

Patients receiving anticoagulation therapy can have low-grade oozing after dermatologic surgery. Sutures and pressure dressings are commonly used to achieve hemostasis, but these methods may not be viable or sufficient to achieve hemostasis in elderly patients with fragile skin on anticoagulation when the surgical site becomes inflamed, friable, and/or dehisced after surgery.

## SOLUTION

Cyanoacrylate, a chemical tissue adhesive, may be used to achieve hemostasis in elderly patients receiving anticoagulation therapy who have persistent low-grade oozing when the skin at the surgical site is thin, inflamed, and friable after dermatologic surgery. Inflamed, friable skin is difficult to suture because sutures often rip through the skin and can further exacerbate bleeding. Cyanoacrylate has numerous additional advantages for achieving hemostasis in this clinical situation, including antimicrobial effects, biocompatibility, accessibility, portability, ease of use, immediate clinical results, and lack of pain.<sup>1</sup> It works best for areas of low tension. Cyanoacrylates have a good safety profile, with no reports of significant adverse effects,<sup>1</sup> and also have comparable aesthetic outcomes to traditional suturing for the closure of linear facial wounds after Mohs surgery.<sup>2</sup> Although the cosmetic result achieved with cyanoacrylate in this particular situation is not necessarily comparable to that seen with primary epidermal closure, it is better than secondary intention with uncontrolled hemostasis, and patients are generally very satisfied. Additionally, the application of cyanoacrylate as a biodegradable and biocompatible agent serves as a useful adjunct hemostatic technique for surgical wounds left to heal by secondary intention in addition to electrocautery and pressure dressing.

## REFERENCES

1. Al-Mubarak L, Al-Haddab M. Cutaneous wound closure materials: an overview and update. *J Cutan Aesthet Surg*. 2013;6(4):178-188.
2. Kim J, Singh Maan H, Cool AJ, Hanlon AM, Leffell DJ. Fast absorbing gut suture versus cyanoacrylate tissue adhesive in the epidermal closure of linear repairs following Mohs micrographic surgery. *J Clin Aesthet Dermatol*. 2015;8(2):24-29.

From the University of Connecticut School of Medicine<sup>a</sup> and Department of Dermatology, University of Connecticut Health Center, Farmington.<sup>b</sup>

Funding sources: None.

Conflicts of interest: Dr Feng is a consultant and medical monitor for Cytrellis Biosystems Inc. Ms Muzumdar has no conflicts of interest to declare.

IRB approval status: Not applicable.

Reprint requests: Hao Feng, MD, MHS, Department of Dermatology, University of Connecticut Health Center, 21 South Rd, 2nd Floor, Farmington, CT 06032. E-mail: [haofeng625@gmail.com](mailto:haofeng625@gmail.com).

*J Am Acad Dermatol* 2020;83:e97.

0190-9622/\$36.00

© 2019 by the American Academy of Dermatology, Inc.

<https://doi.org/10.1016/j.jaad.2019.10.062>