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The Role of Adhesives in Dermatologic Surgery: Tips, Tricks and Review

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The Role of Adhesives in Dermatologic Surgery: Tips, Tricks, and Review of the Literature

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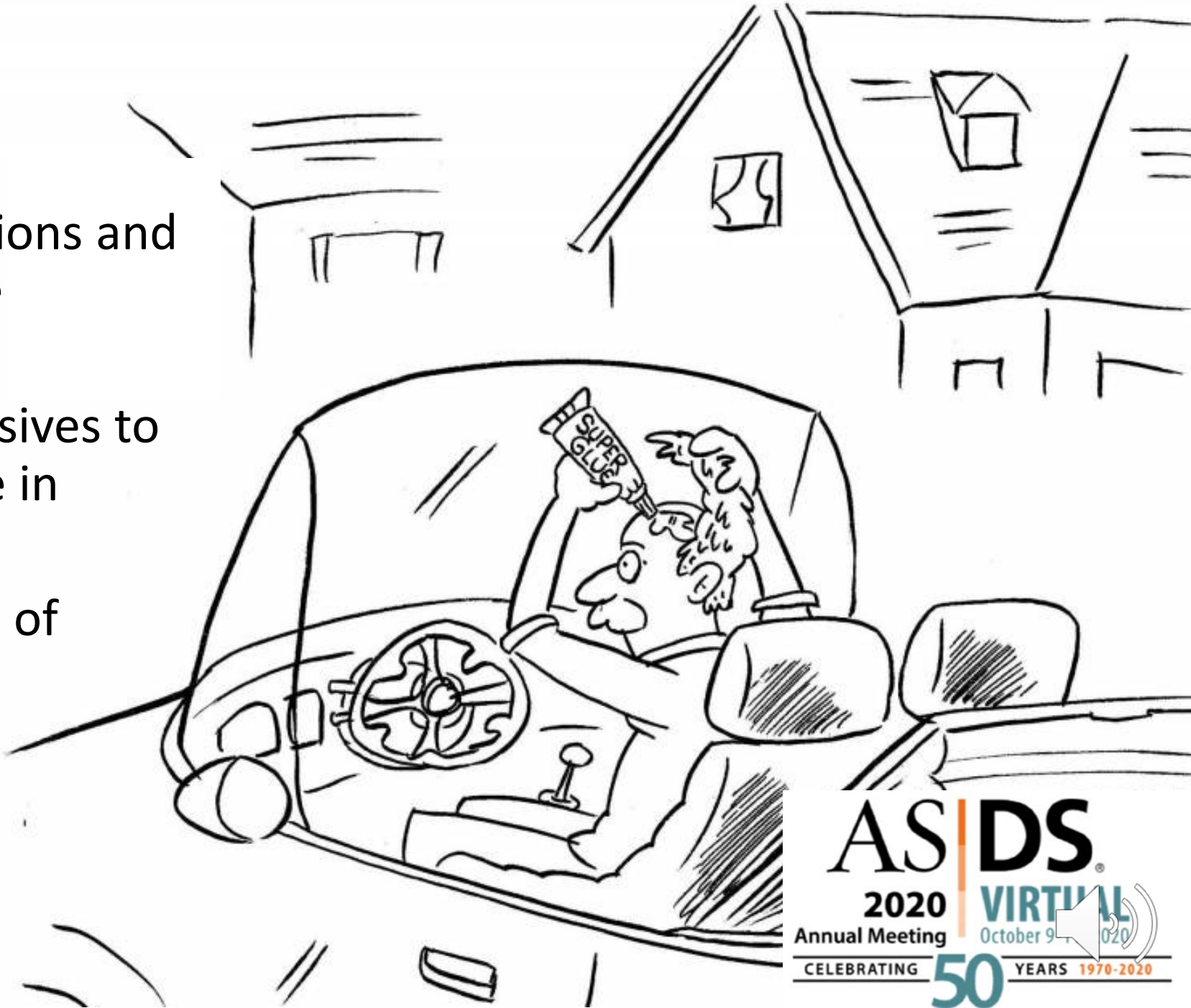
Objectives

- Briefly review indications and labeled uses of tissue adhesives
- Compare tissue adhesives to sutures regarding use in dermatologic surgery
- Discuss off-label uses of tissue adhesives in dermatologic surgery



Tissue Adhesives

- Tissue adhesives are composed of cyanoacrylate compounds
- FDA approved for superficial lacerations and incisions
- N-butyl-2-cyanoacrylate (Indermil, Covidien)
  - 30 sec polymerization
  - More rigid
- Octyl cyanoacrylate (Dermabond)
  - 150 second (2.5 min) polymerization
  - More flexible
- Wound strength equivalent to 5–0 epidermal sutures

Adhesives vs. Sutures

Advantages of Adhesives

- Equivalent cosmesis on face
- Faster closure
- Ease of wound care
- No need for suture removal
- Increased patient satisfaction
- Antimicrobial properties
- No tissue toxicity or delayed wound healing
- Avoids tissue reactivity induced by sutures
- Decreased risk of needle stick

Disadvantages of Adhesives

- Worse cosmesis on trunk and extremities
- Cannot adjust wound edges when dry
- Requires a dry surface
- Increased risk of dehiscence
- Does not help wound eversion
- Equivalent strength to 5-0 suture
- Can cause allergic contact dermatitis
- Can cause foreign body reaction

Tips, Tricks, Novel Techniques

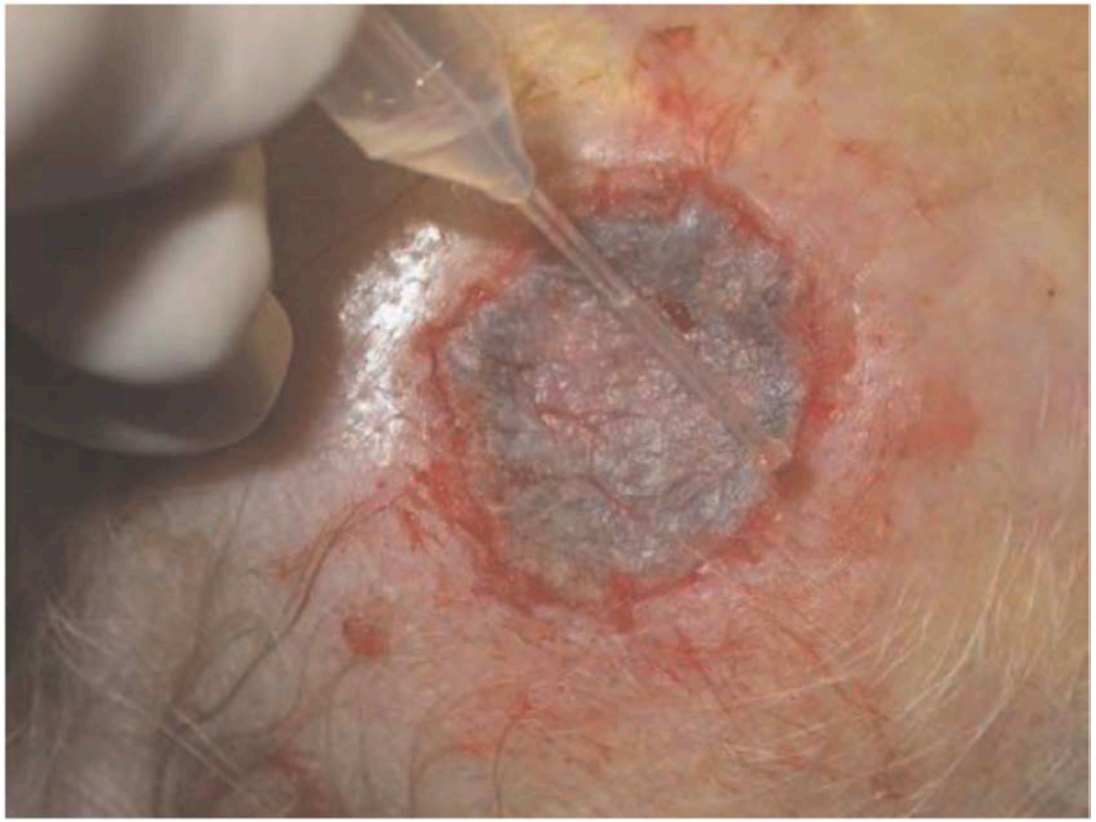
- Increase skin integrity to support sutures
- Hemostasis in patients with low-grade oozing postoperatively
- Secondary intention healing

Tayebi, Bailey MD, MBA; Kaniszewska, Monika MD; Mahoney, Anne Marie MD; Tung, Rebecca MD A Novel Closure Method for Surgical Defects in Atrophic Skin Using Cyanoacrylate Adhesive and Suture, Dermatologic Surgery: January 2015 - Volu 41 - Issue 1 - p 177-180

Tips, Tricks, Novel Techniques

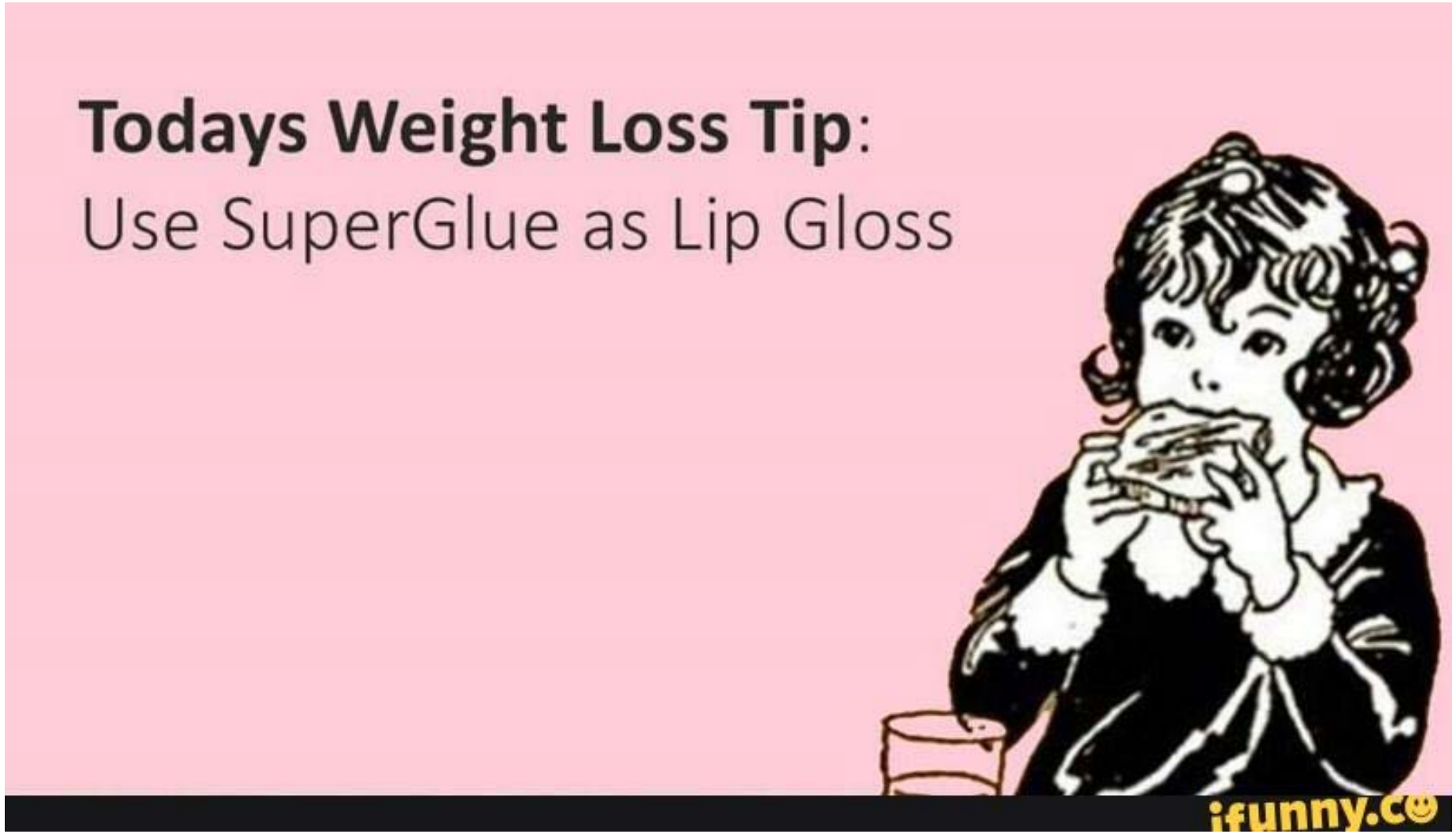
- Full-thickness and split-thickness skin grafting
- Hair transplantation
- Tissue specimen handling for Mohs Micrographic Surgery

Kerure AS, Patwardhan N. Complications in Hair Transplantation. *J Cutan Aesthet Surg*. 2018;11(4):182-189.



Sterling JB, Skouge JW. Surgical glue to secure small split-thickness skin grafts: a cost-effective and time-saving technique. Dermatol Surg. 2008 Feb;34(2):246-7; discussion 247-8.

Thank You



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