include reduced ischemia time, likely resulting in fewer flap complications. In addition, it limits flap or pedicle injury during extirpation. Disadvantages include potential injury if the flap is not adequately secured during extirpation and the need for the reconstructive team to return to the operating room for inset after resection. In one recent case, significant blood loss during resection (after flap harvest and revascularization were complete) necessitated staging of flap inset 48 hours later to allow for adequate resuscitation.[5] The flap remained viable throughout resuscitation and inset (Fig. 2).

A critical component of successful fillet flap execution is open communication between extirpative and reconstructive teams. If the clinical scenario is such that upfront fillet flap harvest and revascularization is feasible, we advocate this approach as an additional measure to minimize complications. Moving forward, although this report demonstrates utility with this technique, further research is necessary to fully characterize its indications and limitations.

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Should We Detach from Mastisol?

Medical adhesives and glues are commonly used over or around surgical incisions for a variety of reasons, including to reduce infection, improve scar appearance, increase incision strength, decrease operative time, negate the need for suture removal, and prolong the adherence of surgical dressings such as occlusive films and Steri-Strips (3M, St. Paul, Minn.). As ubiquitous as they are, they are not without risk. Recently, we reported a 14 percent incidence of allergic reaction to the cyanoacrylate-based surgical glue Dermabond (Ethicon, Inc., Somerville, N.J.).[1] These findings were practice-changing for the senior author (N.B.), who has not used Dermabond since.

Allergic reactions to non–cyanoacrylate-based adhesives have been reported as well; however, an incidence for one commonly used agent, Mastisol liquid adhesive (Ferndale IP, Inc., Ferndale, Mich,), has not been established. The senior author shifted from using Dermabond to Mastisol and Steri-Strips to cover surgical incisions; some reactions were still noted. In an effort to discern whether this was caused by the Mastisol, we conducted a prospective study in patients undergoing bilateral breast procedures. Patients with a history of allergy or sensitivity

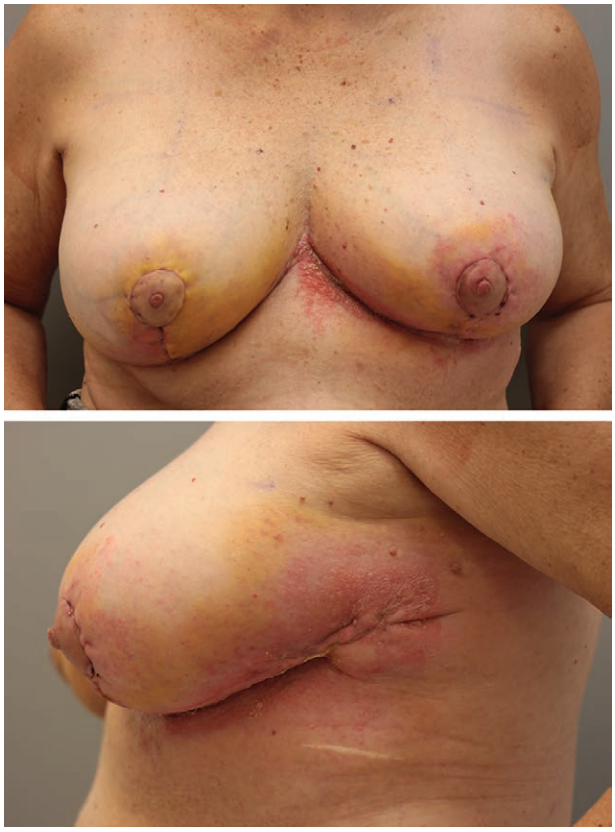

Fig. 1. Left breast allergic reaction to Mastisol. Note the breast swelling and peri-incisional erythema and blistering.

to adhesives or glue were excluded. Right breast incisions were covered with Steri-Strips only as a control, and left breast incisions were covered with Mastisol and Steri-Strips. This was conducted in accordance with the ethical principles of the Declaration of Helsinki.

From January of 2020 to August of 2020, 83 surgical patients (166 sides) were captured. The Steri-Strips remained on the incisions in all patients for 2 weeks, including patients in the non-Mastisol group. Four patients developed reactions with blistering erythema on the Mastisol side, whereas no patients developed reactions on the Steri-Strips–only side (Fig. 1). Of the Mastisol reactions, two were refractory to diphenhydramine and topical steroids, requiring steroid dose packs for improvement, which took over 1 month to resolve. This represented an incidence of 4.8 percent. The senior author terminated the study early, given the prolonged nature of the reaction in two patients.

Mastisol is a skin adhesive that contains gum mastic, which is derived from the *Pistacia lentiscus* tree. It has gained favor over the adhesive benzoin, which had been noted to have an allergic contact dermatitis incidence of 13 percent.[2] However, irritant or allergic reactions to gum mastic-containing products, especially in patients who have previously been exposed to or developed sensitivity to benzoin or other adhesives, have been reported.[3–7] Of note, the reaction can occasionally resemble cellulitis and is worth considering in the differential diagnosis when evaluating patients with postoperative incisional erythema and blistering.[8]

Mastisol is frequently used as a topical agent to secure dressings, such as occlusive films or Steri-Strips. Surgeons should be aware that although reactions are not common, they can be severe and should be considered in the differential diagnosis in patients with erythema and recent Mastisol exposure. We found that Steri-Strips remained adherent to patients' skin just as long on the non-Mastisol side as on the Mastisol side; therefore, we advise against using this adhesive for routine postsurgical dressings.

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To Tie or Not to Knot: How the Half Instrument Tie Technique Outdoes the Traditional Surgeon's Knot

The perceived stability of the surgeon's knot has driven its popularity.[1] To date, only one study has compared the surgeon's knot to the square knot, and reported no statistical difference between the two knots in terms of tension or failure rates.[2] This single study, however, has been insufficient to challenge dogma, and the surgeon's knot continues to dominate clinical practice and trainee experiences.

Despite the widely acknowledged advantages to the surgeon's knot technique, there are also important drawbacks to consider. The second throw in a surgeon's knot creates a natural acute angulation of the suture that creates a gap between each suture. This decreases knot security and prevents sufficient advancement. The outcome is a bulky knot at risk of gapping and obstructing complete approximation of wound edges. Decreased loop security, defined as the ability to maintain a tight suture loop as a knot is tied, is also an inherent risk of surgeon's knots and may further prevent adequate tissue approximation.[3]

We propose an underappreciated alternative to the traditional surgeon's knot: the "half instrument tie." Figure 1 presents its first formal description for a

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