Journal of Surgical Dermatology

doi: 10.18282/jsd.v2.i2.128

CASE REPORT

Printing tattoo effect after use of Dermabond®Prineo® Skin closure system

Shabeer Ahmad Wani*, Loai Abdullah Alsalmi, Waleed Alshehri

Division of Plastic & Reconstructive Surgery, King Fahad Medical City, Riyadh, Saudi Arabia

Abstract: Abdominoplasty is a very common procedure in the plastic surgery practice and may lead to a variety of unfavorable results including incision site complications. The surgical adhesives system, which entered into daily practice to replace the need for subcuticular closure for skin, saves time and may have better wound appearance. Dermabond®Prineo® Skin Closure System (Ethicon Inc., Somerville, NJ, USA) has two major components: 2–Octyl cyanoacrylate glue and a flexible, self-adhesive polyester mesh. It can be used with or without sutures, and has the added benefit of waterproofing, and microbial resistance. It also saves time. This case describes a male patient who experienced a "printing tattoo" effect following an elective procedure of abdominoplasty and the results after this closure system was used.

Keywords: printing tattoo; skin closure system; Dermabond

Citation: Wani SA, Alsalmi LA Alshehri W. Printing tattoo effect after use of Dermabond® Prineo® Skin closure system. J Surg Dermatol 2019; 4(1): 128; http://dx.doi.org/10.18282/jsd.v2.i2.128.

*Correspondence to: Shabeer Ahmad Wani, King Fahad Medical City, Riyadh 11525, Saudi Arabia; swani@kfmc.med.sa

Received: 12th November 2018; **Accepted**: 1st January 2019; **Published Online**: 24th January 2019

Introduction

Scar appearance and final wound result are considered to be major factors in the aesthetic outcome of any procedure. The technique used for wound closure plays a major role. Wound closure routinely uses absorbable subcutaneous and intracutaneous sutures for the closure. When it comes to skin closure, this could be time-consuming due to the wound length that is usually encountered when using sutures. Adhesives were introduced as a new surgical technology[1,2]. Alternative methods of skin closure systems such as 2–Octyl cyanoacrylate (Dermabond™, Ethicon Inc., Somerville, NJ, USA) have been used with success and safely[3-5].

Case report

A medically free 45-year-old gentleman was admitted for an elective pseudogynaecomastia excision post massive weight loss. The patient lost 50 kilograms through a sleeve gastrectomy performed in 2012. He underwent an elective abdominoplasty in 2014 with no post-operative complication. At the time of pre-operative assessment, there was an incidental finding along the abdominal scar: the appearance of a regulated tattoo pinpoint like from the dressing that were used for skin closure during previous surgery (**Figures 1A** and **1B**). It was not itchy nor causing a concern for the patient. He was not using any medications. During physical examination, the patient had normal vitals. There was skin redundancy at the breast and an abdominoplasty scar with markings along the operated site from which the wound healed without further unfavorable results. The patient underwent surgery, this time without using adhesive to close the skin, and the procedure went without complications.

Figure 1. (A and B) Post-abdominoplasty scar showing printing tattoo effect

Discussion

Wound closure in body contouring procedures takes a significant amount of time. When the wound is closed in a classic fashion, the chance of wound edge ischemia increases. Therefore, alternative wound closure systems such as 2–Octyl cyanoacrylate (Dermabond™) have been used with good success[3-5].

The Prineo™ wound closure adhesive presented is a new technology. 2–Octyl cyanoacrylate was found both safe and effective option for skin closure. The application technique was applied according to the instructions provided by manufacturer. Wound edges should be carefully opposed either manually or with the aid of surgical tapes.

Applying direct pressure on the wound edges with the tip of the adhesive applicator should be avoided because this may result in wound margin separation and seepage of the adhesive into the wound that may result in scar tattooing.

We have been using this wound closure system routinely for many years and found it very effective, safe and fast in closing all body-contouring wounds. This is the first case where we found imprint tattooing occurring.

Conflict of interest

The authors declare no potential conflict of interests with respect to the research, authorship, and/or publication of this article.

References

1. Parvizi D, Friedl H, Schintler MV, Rappl T, Laback C, *et al.* Use of 2-octyl cyanoacrylate together with a self-adhering mesh (Dermabond™ Prineo™) for skin closure following abdominoplasty: An open, prospective, controlled, randomized, clinical study. Aesthetic Plast Surg 2013; 37(3): 529–537. doi: 10.1007/s00266-013-0123-3.
2. Quinn J, Wells G, Sutcliffe T, Jarmuske M, Maw J, *et al.* A randomized trial comparing octylcyanoacrylate tissue adhesive and sutures in the management of lacerations. JAMA 1997; 277(19): 1527–1530. doi: 10.1001/jama.1997.03540430039030.
3. Scott GR, Carson CL, Borah GL. Dermabond skin closures for bilateral reduction mammaplasties: A review of 255 consecutive cases. Plast Reconstr Surg 2007; 120(6): 1460–1465. doi: 10.1097/01.prs.0000282032.05203.8b.
4. Nipshagen MD, Hage JJ, Beekman WH. Use of 2-Octyl-Cyanoacrylate skin adhesive (Dermabond) for wound closure following reduction mammaplasty: A prospective, randomized intervention study. Plast Reconstr Surg 2008; 122(1): 10–18. doi: 10.1097/PRS.0b013e318171524b.
5. Perin LF, Helene A, Fraga M. Prineo: A new system for surgical wound closure [Internet]. Plastic surgery pulse news. USA: Quality medical publishing, Inc.; 2010 [cited 2016 July 1]. Available from: http://www.plasticsurgerypulsenews.com.

doi:10.18282/jsd.v2.i2.128