Dermabond protape (Prineo) for wound closure in plastic surgery

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Dermabond Protape (2-octyl-cyanoacrylate and pressure sensitive adhesive mesh; Prineo, Closure Medical Corporation) is a topical mesh and skin adhesive that forms a strong polymeric bond across opposed wound edges allowing the normal healing process to occur. No published studies have already compared the use of a topical mesh skin adhesive in wound closure. This study evaluated the possible applications of a combined mesh-adhesive system in 100 plastic surgery operations (14 different surgical procedures) with a mean follow-up of 85.5 days. The rate of allergic reaction, infection, wound dehiscence and hypertrophic scar formation were recorded in relation to patient co-morbidities, medication and tobacco consumption. No technical restrictions were found during the Derma-bond Pro-tape application. The average time for the topical mesh and skin adhesive application was 2 minutes. The Derma-bond pro-tape was removed 7 through 10 days after the operation. Three patients (3/100 or 3%) reported an allergic reaction without increased scar formation. Hyper-inflammation in one or more wound areas with a micro-abscess were noted in 11 different patients probably due to polyglactin 910 (vicryl) sutures at their scheduled follow-up visit 1 week after their operation. Increased tissue inflammation and scar formation were found in these patients with hypertrophic scars in 1 patient (1/11 or 9.1%). One upper leg wound dehiscence was seen in a diabetes mellitus patient using corticosteroids. Two patients (2/100 or 2%) with a history of tobacco abuse showed a partial wound dehiscence after an abdominoplasty and a partial areola dehiscence after mamma reduction respectively.

Biography
Martain Pierre Jean Loonen is a specialist of plastic surgery with extensive experience and interest in plastic, reconstructive, cosmetic and hand and wrist surgery. He is a recognized fellow of the Collegium Chirurgicum Plasticum of the Board of Plastic Surgeons of Belgium, and holds recognized membership of the Dutch Society of Plastic surgeons. He holds a Doctoral Degree in Plastic Surgery and has achieved his degree with outstanding honors as the youngest PhD candidate to have attained that distinction at his Alma Mater, the University of Utrecht in the Netherlands.

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