✚ Evidence in focus

Publication summary: Gravante G, et al. *J Burn Care Res* (2007)*

Smith+Nephew

VERSAJET® Hydrosurgery System significantly reduced procedure time for body areas that are difficult to debride and was as effective as dermatome escharotomy for achieving correct dermal plane during burn debridement

✚ Plus points

46% significant relative reduction in mean procedure time for difficult to debride areas with the VERSAJET System versus dermatome escharotomy (p=0.02)

The VERSAJET System was **as effective** as dermatome escharotomy in achieving correct dermal plane during burn debridement

Overview

- Prospective, randomized trial at one burn center in Italy
- Patients (N=87) with thermal burns (mean age, 48 years; 57.5% male) received burn debridement with either the VERSAJET System (n=42; total body surface area affected [TBSA], 25%) or hand-held dermatome escharotomy (n=45; TBSA, 23%)
- Patients received debridement under general anesthesia from postburn day 3 to 17
- After debridement, patients underwent immediate skin grafting where possible
  - If not, patients with signs of preoperative infection received ACTICOAT® Antimicrobial Barrier Dressings (Smith+Nephew, UK) and those without received AQUACEL® Ag (ConvaTec, USA)

Results

- Adequate wound bed debridement achieved with both techniques
- Similar overall operative times with the VERSAJET System and dermatome escharotomy
  - VERSAJET System was significantly faster for body areas that are difficult to debride, such as hands, face and genitals (Figure)
  - Dermatome escharotomy was significantly faster for large surface areas, such as trunk, arms and legs (21 vs 14mins; p=0.01)
- No significant difference in wound closure time and contracture incidence between the two groups
- Where minor wound bed bleeding occurred with the VERSAJET System, it resolved spontaneously or after electrocautery

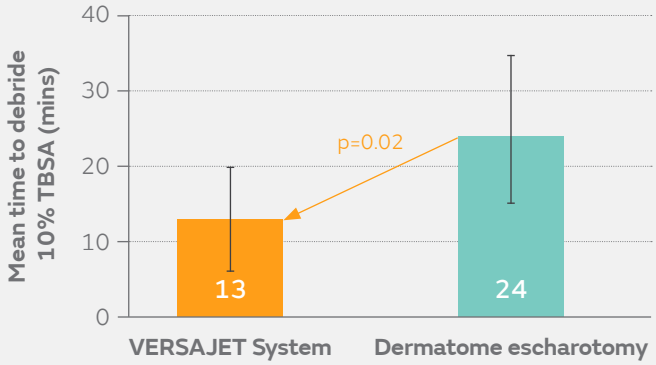

Figure. Mean time to debride 10% TBSA of hands, face and genitals with the VERSAJET System and dermatome escharotomy. Error bars, ±standard deviation

Conclusions

The VERSAJET System reduced procedure time for areas that are difficult to debride (eg, hands, face and genitals) versus dermatome escharotomy. The authors noted that the VERSAJET System was simple to use and precise at reaching and maintaining the correct dermal plane.

Citation

*Gravante G, Delogu D, Esposito G, Montone A. Versajet hydrosurgery versus classic escharotomy for burn débridment: a prospective randomized trial. *J Burn Care Res*. 2007;28:720–724.

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For detailed product information, including indications for use, contraindications, precautions and warnings, please consult the product's applicable Instructions for Use (IFU) prior to use.

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