

Use of the VERSAJET[®] Hydrosurgery System is effective and reduces chronic wound debridement time compared with conventional debridement: results from a systematic literature review

Shimada K, Ojima Y, Ida Y, Matsumura H. Efficacy of Versajet hydrosurgery system in chronic wounds: A systematic review. *Int Wound J*. 2021 Mar 23. [Epub ahead of print].

Available at: [International Wound Journal](#)

Key points

Significantly shorter debridement time

with the VERSAJET System versus conventional debridement (mean difference -8.9min; p<0.00001)

>70% of cases

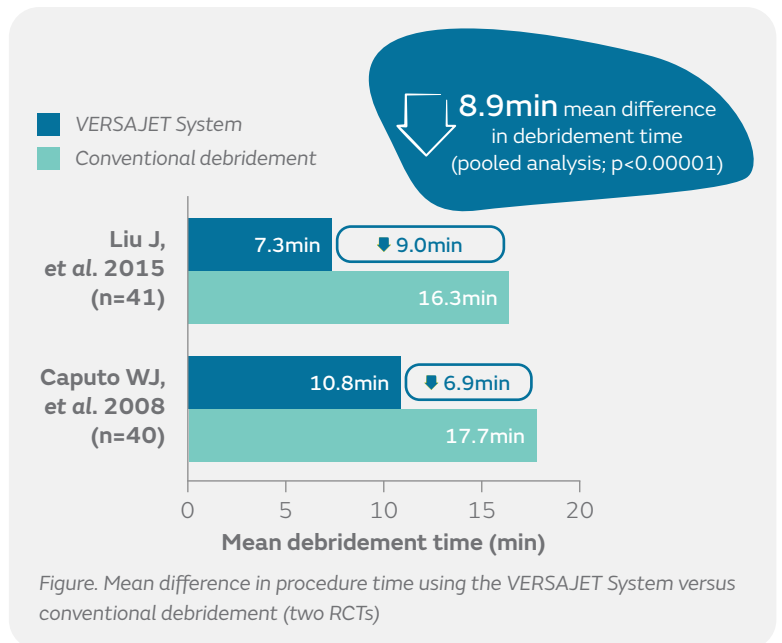
required only one VERSAJET System session to achieve wound bed preparation

Overview

- An independent, systematic literature review of studies evaluating the efficacy of the VERSAJET System (including the VERSAJET II Hydrosurgery System)
- Publications in English including patients with chronic wounds, ulcers and non-acute wounds were reviewed (1 Jan 2000 to 10 Aug 2020)
- Excluding duplicates, 497 studies were extracted and seven (645 patients) were included after full-text screening
 - Prospective, randomised controlled trials (RCTs; n=2); retrospective, comparative studies (n=2); prospective, non-comparative studies (n=3)
 - Comparative studies evaluated the VERSAJET System versus conventional debridement or moist dressings

Results

- Compared with conventional debridement or moist dressings, use of the VERSAJET System resulted in:
 - Significantly shorter procedure time (two RCTs; mean difference, -8.9min [95% CI: -9.8, -8.0]; p<0.00001; Figure)
 - Similar time to wound closure (two RCTs) and reduction in bacterial load (one RCT)
 - Less saline use and blood loss (one RCT each)
 - Potential cost savings (one RCT and one retrospective comparative study)
- In >70% of cases, one VERSAJET System session achieved adequate wound bed debridement for closure or secondary healing (five studies)
- Pain with use of the VERSAJET System was mild to moderate and tolerable to patients (two studies; one versus moist dressings, one non comparative)



Conclusions

Use of the VERSAJET System was effective and significantly reduced mean debridement procedure time compared with conventional debridement in a pooled analysis of two prospective RCTs; wound bed preparation was achieved in a single session for most cases.

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.