

Rapid wound debridement: Clinical outcomes and clinician satisfaction after up to 2 applications of monofilament fibre debridement technology*

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Aim

To investigate clinical outcomes and clinicians' and patients' satisfaction with standard care delivered using 1 or 2 debridements by monofilament fibre technology (MFDT) [Figure 1] in chronic wounds.

Method

Chronic wounds were evaluated in a real-world setting. Chronic wounds or skin with visible debris and/or slough that required debridement were included. Any patient who met the inclusion criteria was eligible. Patients were managed according to local standard care and debridement was undertaken with MFDT once or twice. Care and outcomes were recorded in normal patient records. Clinicians completed a web-based survey to report clinical outcomes and clinician and patient satisfaction following debridement. Outcomes were summarised descriptively.

Results / Discussion

1,180 clinicians participated and completed the survey. 70% had previously used MFDT. Venous ulcers (LU: 63%), pressure ulcers (PU: 10%), dehisced surgical wounds (DW: 3%), diabetic foot ulcers (DFU: 8%) and other wounds (13%) were managed using MFDT in the evaluation [Figure 2]. Visible change was reported after one use of MFDT for all wound types ranging from 69% (DW) to 83% (other wounds). Visible change in wound characteristics was reported after two uses of MFDT in 91% of LU, PU, and other wounds, 93% of DFU and 95% of DW [Figure 3]. Overall, >80% of clinicians and patients who answered the survey question were completely satisfied or satisfied with outcomes [Figure 4].

Conclusion

Debridement of skin and wounds with 2 applications of MFDT leads to visible change in a high proportion of chronic wounds, and high levels of clinician and patient satisfaction.

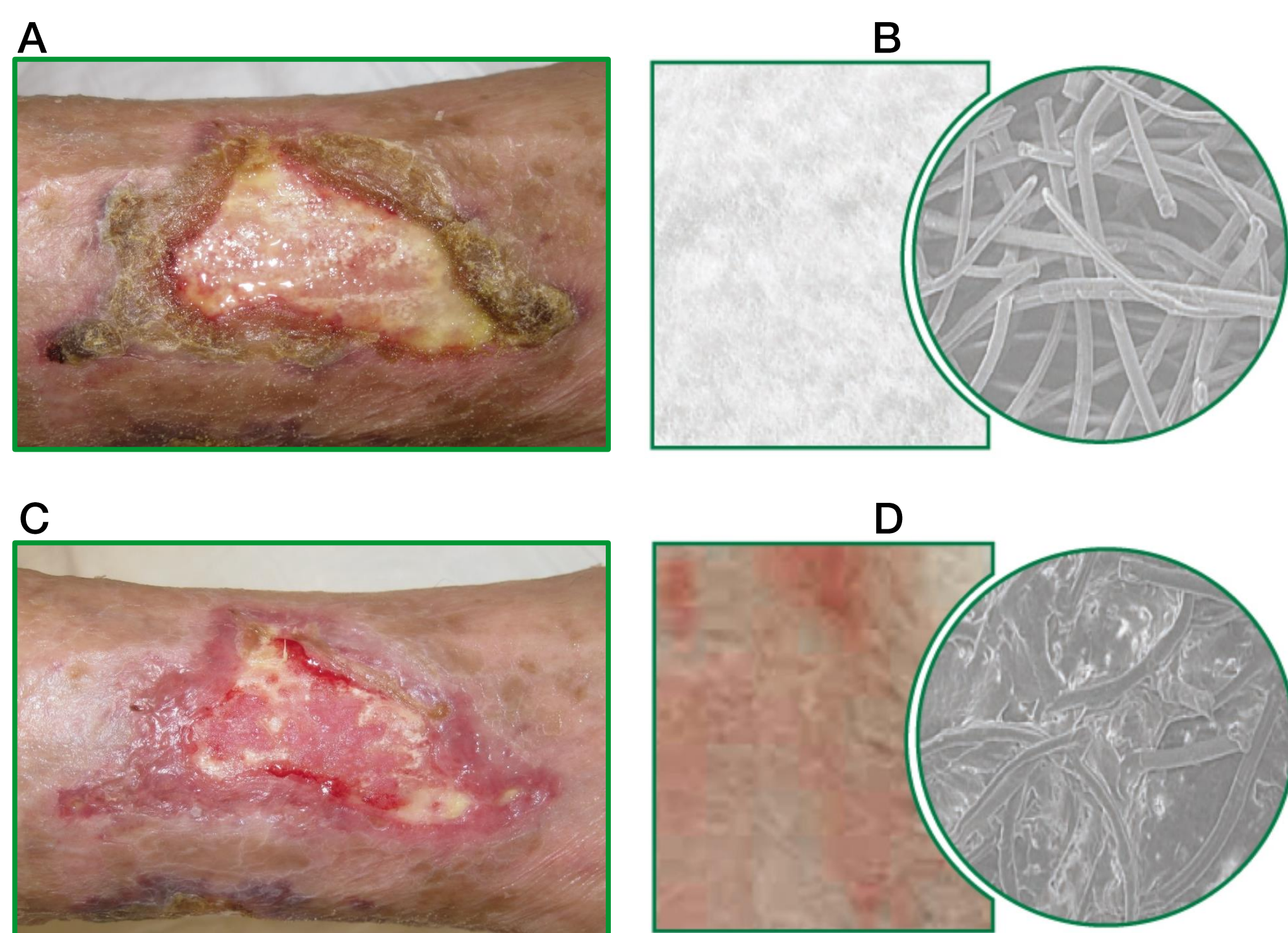


Figure 1:

- (A) Wound before debridement with MFDT.
- (B) Picture and electron micrograph of MFDT before used for debridement. Single monofilament fibres can be seen.
- (C) Wound after debridement with MFDT.
- (D) Picture and electron micrograph of MFDT after used for debridement. The wound exudate and potential biofilm has been incorporated into the fibres and therefore removed from the wound.

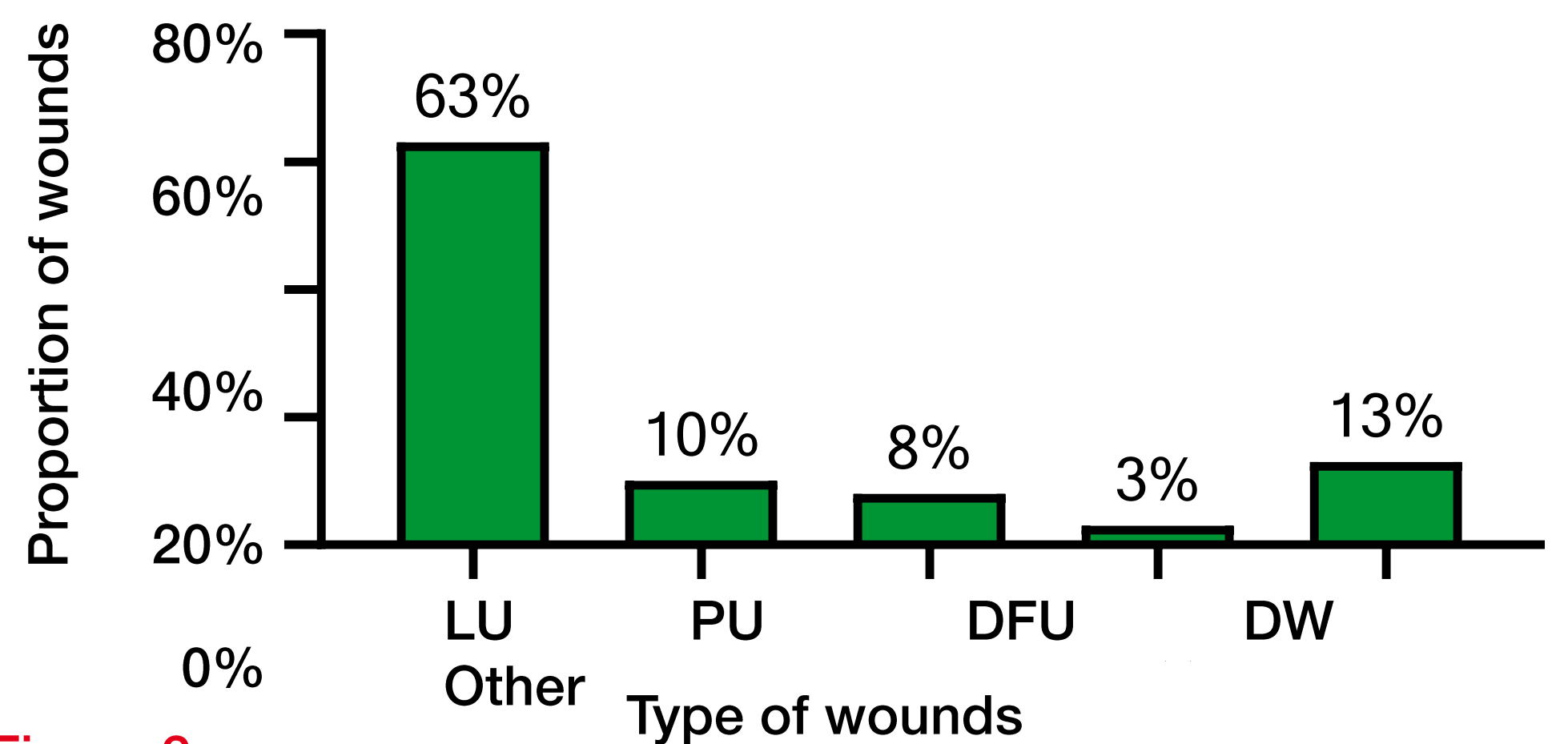


Figure 2:

Proportion of wounds that have been managed using MFDT in the evaluation.

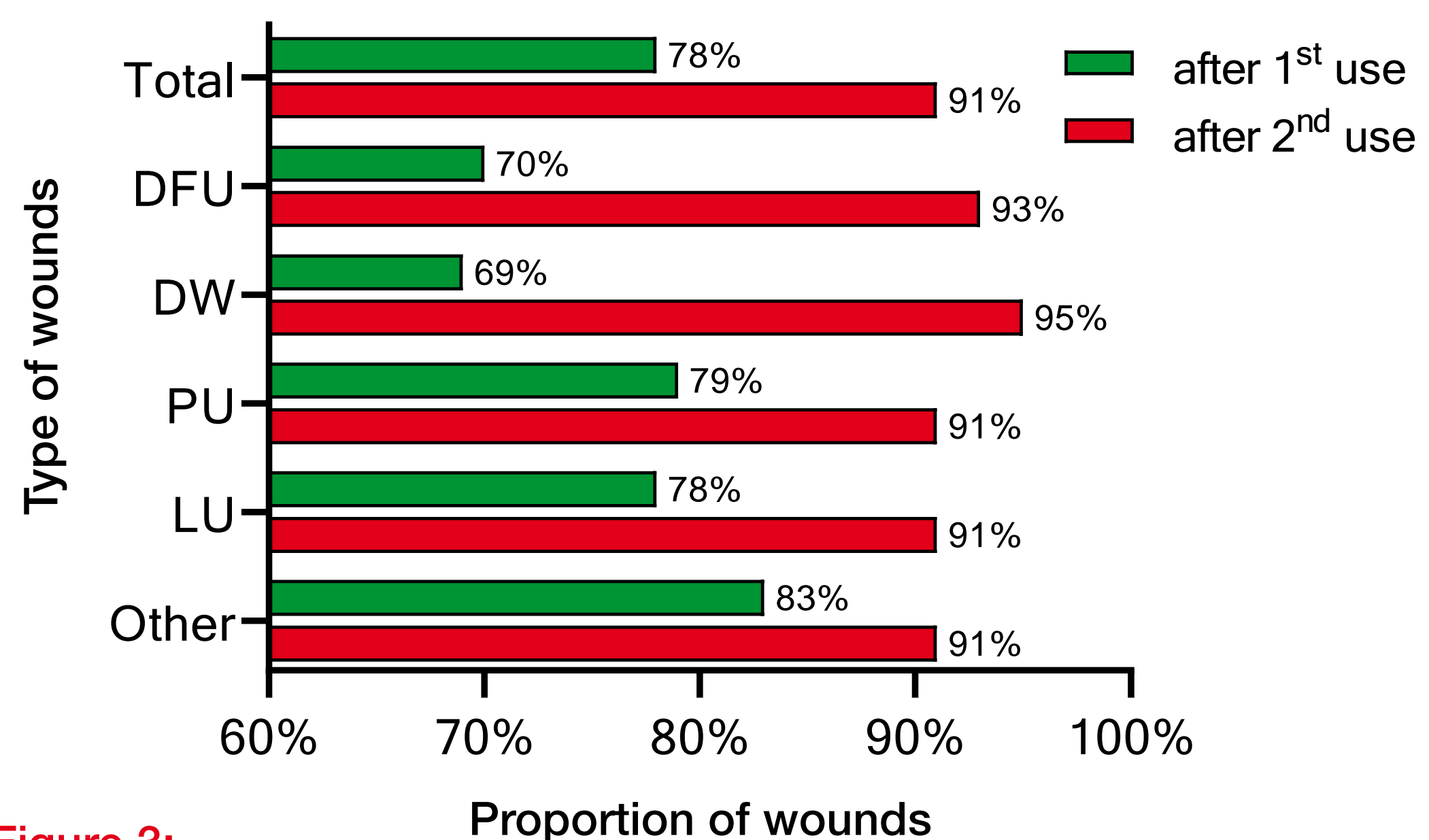


Figure 3:

This figure plots the proportion of wounds reported to have a positive visible change after one [green bars] and two [red bars] usages of the MFDT. Across all types of wounds [Total], there is a visible positive change after one use in 78% of the wounds. After the second use, this number increases to 91%. This tendency can be seen, for all types of wounds.

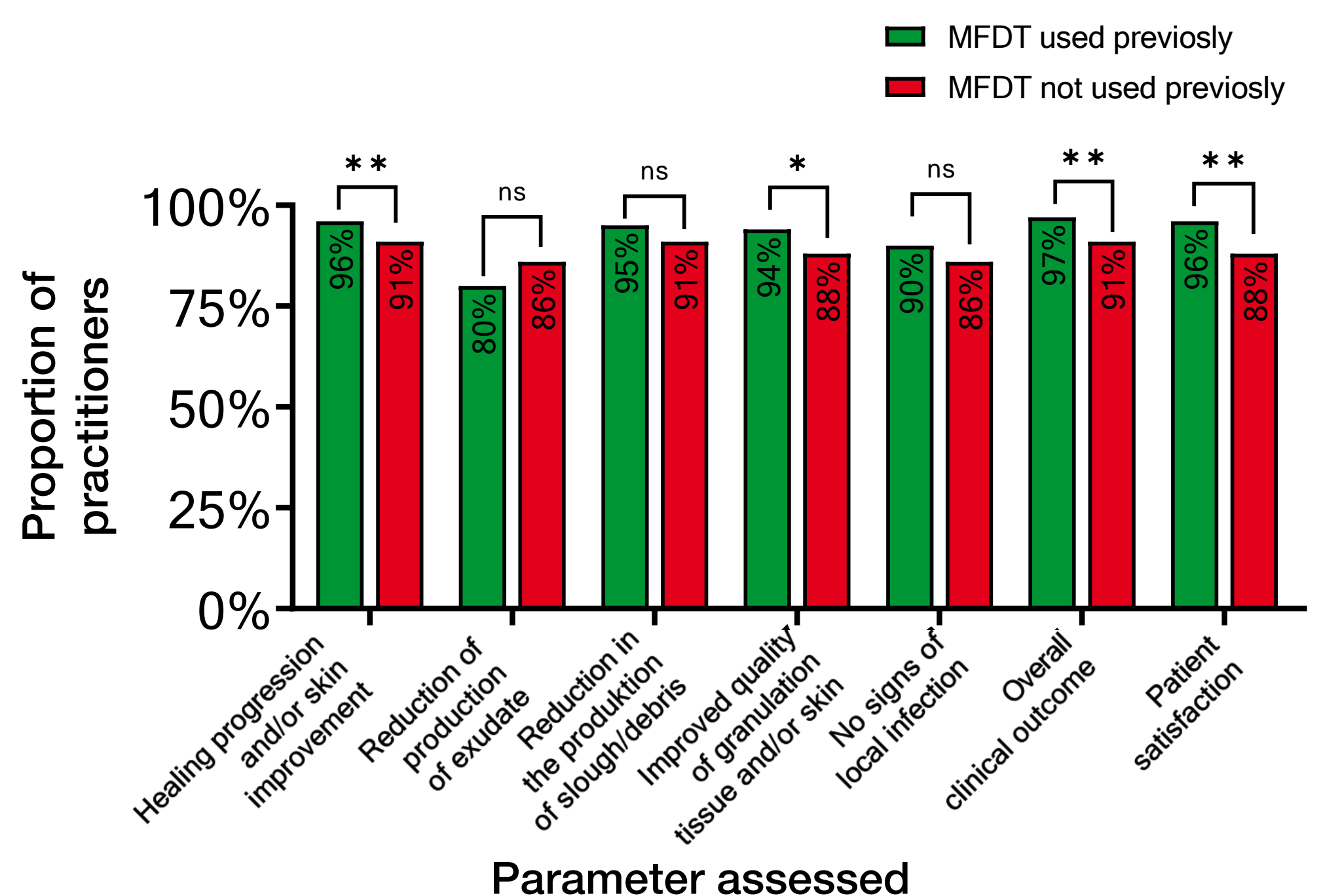


Figure 4:

Proportion of practitioners who were either completely satisfied or satisfied with the respective clinical parameter. Practitioners who previously used MFDT [green bars] and those who used it for the first time [red bars] are displayed side by side. The parameters were assessed on a 5-point Likert scale (completely satisfied, satisfied, neither satisfied or dissatisfied, somewhat dissatisfied, dissatisfied). For some parameters a small but statistically significant difference between the two groups can be seen (ns $p > 0.05$, * $p \leq 0.05$, ** $p \leq 0.01$).