



Ultrasonic-Assisted Wound Debridement (UAW): improved wound condition in diabetic foot ulcers

The treatment of chronic diabetic foot ulcers (DFU) is very complex. In addition to vascular diseases these wounds often present infections which require systemic antibiotic therapy. However, provided antibiotics might not reach the wound bed due to poor vascular status in the DFU, increasing the risk of wound infection to spread out. A recent study has shown that wound debridement with UAW is a promising option for cleaning the wound bed.



UAW instrument, double-ball, by Söring

The study at a glance

- *Title of the study: "Ultrasound-assisted debridement of neuroischaemic diabetic foot ulcers, clinical and microbiological effects: a case series"*
- *Authors: José Luis Lázaro-Martínez, Francisco Javier Álvaro-Afonso, Yolanda García-Álvarez, Raúl Juan Molines-Barroso, Esther García-Morales, David Sevillano-Fernández*
- *Published: J Wound Care (2018); 27(5): 278–286, <https://doi.org/10.12968/jowc.2018.27.5.278>*
- *Prospective study involving a case series of 24 neuroischaemic DFUs*
- *Evaluation of the effects on quantitative and qualitative bacterial load in the wound bed of DFU after sequential treatment with Söring UAW during a six-week treatment period*
- *Soft tissue punch biopsies every second week of treatment, before and after wound debridement sessions*

Results of the study:

- *Significant bacterial load reduction, independent of bacterial species, some of which exhibited antibiotic-resistance*
- *Significant improvement in wound conditions and significant reductions of wound size*
- *The study results suggest that wound debridement with Söring UAW can avoid unnecessary use of antimicrobials and reduce the risk of bacteria emerging with enhanced resistance levels.*