

The MolecuLight *i:X*TM Imaging Device can help to guide debridement by identifying areas of bacterial load in chronic wounds

Targeted debridement using images from the MolecuLight *i:X* Device helped to reduce bacterial burden in the wound and periwound area in combination with other treatment strategies



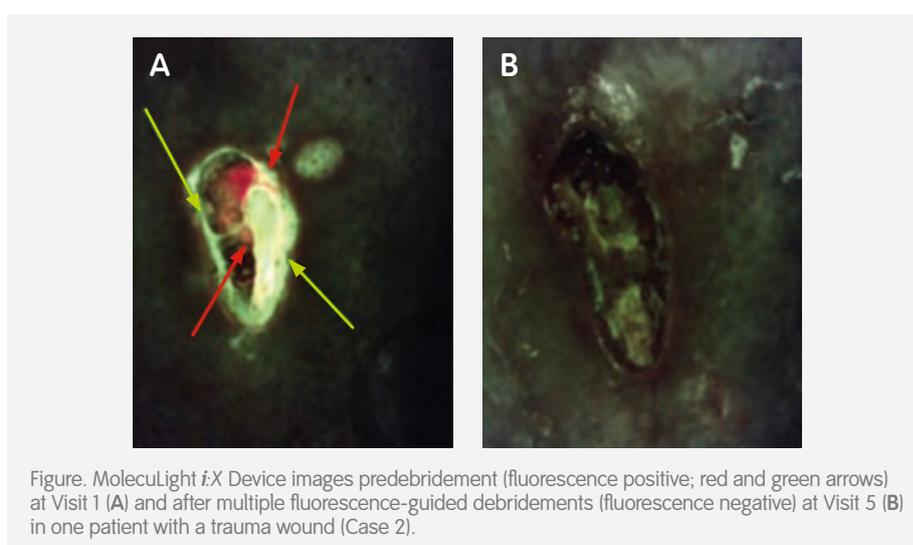
Study overview

- A case series evaluating the utility of the MolecuLight *i:X* Device for targeting debridement to help manage bacterial burden in patients with lower extremity chronic wounds at a single US centre
- Ten adult patients (5 male, 5 female; median age 74.9 years) with wounds of varying aetiology (4 trauma wounds; 3 venous leg ulcers, 2 diabetic foot ulcers, 1 surgical wound) were included; four cases were discussed in detail
- Wound measurements, standard images and fluorescence images were collected using the MolecuLight *i:X* Device at every weekly assessment; guided debridement was performed on wounds with bacterial fluorescence using a surgical blade or curette



Key results

- Fluorescence detected within the wound using the MolecuLight *i:X* Device decreased with each debridement, but not in the periwound area
 - Therefore, secondary antimicrobial dressings or oral antibiotics were also used to treat the periwound area
- In the author's opinion, use of the MolecuLight *i:X* Device in one patient helped to identify early cellulitis, facilitated timely antibiotic use and may have helped to prevent hospitalisation
- In three other cases, weekly debridement directed using the MolecuLight *i:X* Device, in addition to appropriate use of other treatments, reduced or eliminated bacterial fluorescence within ≤ 5 visits (Figure)



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Evidence in focus (continued)



Conclusion

Use of the MolecuLight *i:X*TM Device enabled targeted debridement both within the wound and periwound area, as well as informing clinical decision making about appropriate use of therapies and dressings to help decrease bacterial load.



Considerations

- Other therapies used to help reduce bacterial burden in the periwound area in these patient cases included enzymatic debriding agents, polyhexamethylene biguanide hydrochloride collagen matrix and a hydrophobic, bacterial-binding nonadherent contact layer
- Most patients had only one fluorescence-directed debridement at each visit except for three patients who required two debridements at one single visit



Study citation

*Cole W and Coe S. Novel bacterial auto-fluorescence imaging device can lead to more targeted debridement. *Today's Wound Clinic*. 2019;13(4):14–20. Available at: [Today's Wound Clinic](#) 

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.