Point of Care Identification of *Pseudomonas aeruginosa* with the MolecuLight i:X® Led to Targeted Treatment

*Pseudomonas aeruginosa* is one of the most common pathogens found in chronic leg ulcers, frequently leading to a stall in wound healing\(^1\). Its unique intrinsic and acquired antibiotic resistances make early identification and the selection of *Pseudomonas*-specific treatment regimes critical in wound care\(^1\). *P. aeruginosa* sometimes presents with unique clinical symptoms, including a malodorous, greenish crust and a greenish tinge on removed dressings\(^3\), but there are cases when no specific signs and symptoms are observed\(^3\). This bacterial species has unique fluorescent properties and is indicated by a cyan color on MolecuLight i:X fluorescence images\(^4\), enabling immediate species identification.

This patient’s stalled wound exhibited no clinical signs and symptoms specific to *Pseudomonas aeruginosa* colonization, yet real-time visualization of cyan fluorescence on MolecuLight i:X images (Figure 2) strongly suggested *P. aeruginosa* (>10⁴ CFU/g)\(^4\). Obtaining this information at the point of care led the clinician to immediately select an antimicrobial dressing indicated for use against *P. aeruginosa*. Swabs taken from regions of cyan fluorescence under MolecuLight i:X fluorescence guidance later confirmed moderate growth of *P. aeruginosa*.

At the next visit, cyan fluorescence was no longer detected, supporting the effectiveness of the chosen antimicrobial treatment. Systemic antibiotics were not re-prescribed. With this effective eradication of *P. aeruginosa* contamination, the wound began to heal within three weeks.
CASE STUDY

Vancouver Coastal Health - North Vancouver, BC, Canada

MolecuLight i:X®

The MolecuLight i:X allows clinicians to quickly, safely and easily identify wounds with bacteria4-7 (at loads of >10⁴ CFU/g, in combination with CSS) and measure wounds5,7 at the point of care to provide them with valuable information to inform treatment and monitor progress6,7.

Q Testimonial

“I would not have suspected Pseudomonas on this wound. Both the Infectious Disease physician and myself were surprised when the i:X images showed clear presence of the cyan color, which influenced my clinical practice.”

— Rosemary Hill, BSN, CWOCN, CETN(C)

Visit www.moleculight.com

+1.647.362.4684
Toll Free 1.877.818.4360 (Canada)
info@moleculight.com

Follow us: 

MolecuLight®

©2019 MolecuLight® Inc. All Rights Reserved. PN 1306 Rev 1.1

The MolecuLight® i:X Imaging Device is approved by Health Canada for sale in Canada and has CE marking for sale in the European Union. The MolecuLight® i:X Imaging Device has received FDA clearance.

MolecuLight® is a Registered Trademark in Canada, the US, and the EU.

References:


©2019 MolecuLight® Inc. All Rights Reserved. PN 1306 Rev 1.1

The MolecuLight® i:X Imaging Device is approved by Health Canada for sale in Canada and has CE marking for sale in the European Union. The MolecuLight® i:X Imaging Device has received FDA clearance.

MolecuLight® is a Registered Trademark in Canada, the US, and the EU.

Cyan/white color in this image indicates bacteria (>10⁶ CFU/g)4,5.