Identification of Deep Wounds

September 17, 2009

Wounds, including burns, ulcers, infections or cancers, represent a costly and pervasive condition impacting the lives of millions of Americans a year – resulting in significant physical, emotional and financial consequences to those affected. Unfortunately, nurses and doctors do not have access to easy-to-use and affordable analytical tools that help them properly identify and treat wounds. That is, until now.

On September 17, 2009, in a revolutionary evaluation, clinical technologists at the University of Texas Southwestern Medical Center at Dallas used Spectral MD™ technology – DeepView™ – to observe deep, hidden internal wounds of a patient in Dallas, Texas.

Dr. Michael DiMaio, Associate Professor and cardiothoracic surgeon, evaluated a patient who had undergone surgery on his abdomen and had been experiencing postoperative pain. The DeepView technology enabled identification of several key areas deep under the skin that were infected and needed immediate medical attention. Furthermore, the areas that were infected were not under the incisions themselves but rather adjacent to the external wounds, a difficult place for clinicians to detect using only visual indications; however, with DeepView, Dr. DiMaio was able to find and treat the infection quickly and without pain to the patient. This was the first time that clinicians had been able to make use of visualizations of cardiovascular signatures deep below the skins surface without using any degree of invasiveness.

DeepView uses a non-invasive digital illumination approach that allows clinicians to look deeper, delivering images from up to two centimeters under the skin's surface without ever touching the patient. The unit is not only revolutionary in its technology but is also portable, cost effective and patient friendly.

Without the DeepView unit, Dr. DiMaio would have not been able to clearly locate and assess the patient's internal infections. Leaving the infections undetected would have caused the patient further stress and pain after an already taxing surgical procedure. Nevertheless, because of the advanced technology that DeepView offers clinicians and patients, the patient was able to recover rapidly with the use of targeted antibiotics.