

Medco Forum Presents: Xhale Assurance Alar Site Effective Site for Pulse Oximetry

Assurance[®] Alar One-Sense[™] Sensor offers a simple, highly-effective single-point-of-contact device that reliably monitors critical parameters

Research presented at the 2013 Society for Technology for Technology in Anesthesia demonstrates that the “nasal ala is an attractive site for pulse oximetry because of the rich perfusion by branches of both the external and internal carotid arteries.”

“Sites on the face, particularly the nasal ala, have been shown to detect desaturations sooner than peripheral sites,” explained Dr. Mark J. Rice, Section Chief, Liver Transplantation and General Surgery Sections, Department of Anesthesiology, University of Florida College of Medicine.

“Nasal ala pulse oximetry demonstrates accurate SpO₂ ($\pm 2\%$) values over a range of 70—100%,” said Richard J. Melker, PhD, MD, Professor of Anesthesiology and Pediatrics and Biomedical Engineering at the University of Florida College of Medicine, Gainesville, FL, in a presentation at the 2013 Society for Technology for Technology in Anesthesia.



The Assurance[®] Alar One-Sense[™] Sensor is not affected by patient movement, eating, or talking

Advantages of the Alar Site

“In instances of poor peripheral perfusion, anesthesiologists find the PPG signal to be superior and often increased at the nasal ala. This is particularly true when vasopressors are given to shunt blood flow from the periphery to the central circulation,” explained Dr. Rice.

“The ala is also an ideal site as it is usually easily available to an anesthesiologist,” concluded researchers reviewing the results of a study performed at the University of California San Francisco’s HYPO2XIA lab.

“The nasal ala is supplied by branches of the internal and external carotid arteries and is less influenced by increased sympathetic tone (especially the internal carotid artery), thus there is a more consistent and reliable signal, which results in more reliable oxygen saturation determinations,” said Dr. Rice.

Unique Nasal Ala Pulse Oximetry Sensor

In the University of California study discussed above, researchers used the Assurance Alar One-Sense Sensor. Dr. Rice evaluated the Assurance Alar One-Sense Sensor, comparing its effectiveness with finger pulse oximetry.

“Early on in our study, we were doing a Whipple procedure that had an episode of unexpected blood loss. There was a point at which we were giving pressors before we could restore the blood volume to a normal level. The pulse oximetry signal in the finger completely went away, but



the signal from the alar sensor was still very strong. At that moment, I knew this new technology was special.”

“After using this probe numerous times, especially during large cases, I believe that this technology will become very popular with the anesthesia community,” noted Dr. Rice.

The Assurance Alar One-Sense Sensor was developed by Xhale Assurance, Inc. The company is committed to providing clinicians with easy-to-use, cost-effective diagnostic solutions that improve patient safety and reduce false alarms.

**For more information about Xhale Assurance,
please call 855-743-4589,
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or speak to a representative at the
*ANESTHESIOLOGY™ 2013 conference, Booth # 1543.***