

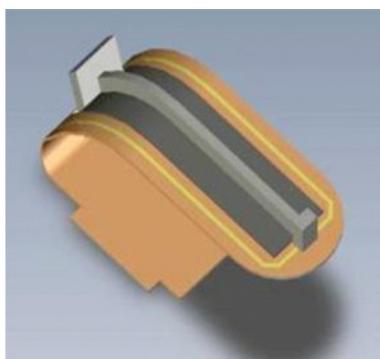
Trends & Technology

Hemolung Respiratory Dialysis System

ALung Technologies (Pittsburgh, PA), Hemolung respiratory dialysis device overcomes the limitations of mechanical ventilation by using dialysis via the femoral or jugular veins to perform respiratory gas exchange.

Compared to invasive mechanical ventilation, the Hemolung is expected to provide the following benefits: Elimination of sedation allows the patient to stay alert, eat and communicate; Elimination of ventilator associated pneumonia eliminates dangerous complications, and should reduce cost of care and length of stay in the ICU.; Avoidance of intubation allows the patient to eat, speak and prevents tracheal injury and sinus infection; Reduction in weaning failure should reduce length of stay in the ICU and potential mortality; Reduction in tracheostomies will reduce an invasive surgical procedure to the larynx and reduced lung injury may reduce the incidence of death.

Optical Blood Pressure Monitor Breakthrough



Tarilian Laser Technologies, Hertfordshire, UK claims it has developed the “greatest technological advance in blood pressure measurement for 130 years”. Unlike direct pressure measurement, this Sapphire device uses an optical sensor to continuously

measure blood pressure at the wrist. Keeping the Sapphire stationary will provide beat-to-beat readings and the device can effectively be used to detect white coat hypertension. <http://tarilian-lasertechnologies.com/sapphire.htm>

Proxima Generation 2 Arterial Blood Analyser



Sphere Medical, Cambridge, UK has launched Proxima Generation 2 disposable arterial blood analyser. The device is intended for continuous monitoring of glucose, blood gas &

electrolytes in patients in the OR and ICU and a recent clinical study has shown that the Proxima Generation 2 provides an equivalent performance when compared to lab and point-of-care blood gas analysers of arterial blood. All the blood is immediately returned to the patient.

http://www.spheremedical.com/proxima_system

EZ Vein for Difficult IV Access

FDA approved the EZ Vein, a new device developed by an Oklahoma doctor for easing the placement of intravenous catheters in challenging patients. Much like with a blood pressure cuff, the device is inflated using a hand pump and vasculature within the window opening is more readily seen. Dr. Robert Perry, a resident at Oklahoma University Medical Center, is the tinkerer that developed the device in his home workshop



<http://medgadget.com/2011/12/difficult-iv-access-ez-vein-to-the-rescue.html>

Draeger Infinity CNAP Non-Invasive Continuous BP Monitor

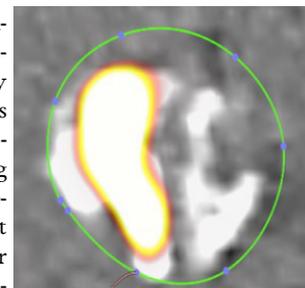
Draeger has launched a technology that was clinically tested on patients undergoing general anesthesia and found to provide “real-time estimates of arterial pressure comparable with those generated by an invasive intra-arterial catheter system.” Developed by **CNSystems** (Graz, Austria), the technology provides continuous beat-to-beat readings of systolic, diastolic and mean blood pressure using a double finger sensor. As the sensor detects changes in blood volume based on the amount of light transmitted through the finger, the cuff pressure closely follows the instantaneous pulsatile blood pressure changes in the finger arteries. Blood pressure can then be calculated beat-to-beat, after calibration with the built-in standard oscillometric measurement (NBP) of the monitor – and a high resolution, real-time arterial pressure waveform and systolic, diastolic and mean pressure value are displayed on the monitor.



<http://www.dotmed.com/news/story/17262/>

PET Scans Spot Early Signs of Aortic Stenosis

Researchers from the University of Edinburgh, Scotland have demonstrated early detection of aortic stenosis using positron emission tomography (PET) scanning and chemical tracers. The researchers used two different tracers as markers of vascular inflammation (18-fluorodeoxyglucose) and calcification (sodium 18-fluoride) in the valves of patients with aortic stenosis.



http://medgadget.com/cardiac_surgery

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