Intelligently managing VAP control

To reduce VAP and tracheal injuries
Known problems in endotracheal cuff pressure management
For many years, the leakage of oral secretions past the endotracheal tube (ETT) has been a causative risk factor in the development of Ventilator Associated Pneumonia (VAP) and tracheal injuries. Existing solutions for endotracheal tube cuff pressure management require manual monitoring and adjustment of cuff pressure – a critical aspect of the ICU workload. It has been shown that up to 8 manual cuff pressure adjustments are required daily to maintain the recommended cuff pressure ranges,

Optimal cuff pressure with IntelliCuff®
Following AARC Guidelines, HAMILTON MEDICAL has developed IntelliCuff®, a new noninvasive automatic cuff pressure controller for use with HAMILTON MEDICAL ventilators. IntelliCuff® helps to reduce VAP and tracheal injuries by continuously monitoring and automatically adjusting cuffed tracheal and tracheostomy tubes, providing real-time cuff pressure optimization.

Reduce complexity with an integrated solution for cuff pressure management
The IntelliCuff® control module and software are integrated parts of HAMILTON MEDICAL ventilators, and controlled via the Ventilation Cockpit – the same unique user interface used to adjust and adapt ventilation therapy. The Ventilation Cockpit reduces complexity by graphically displaying the patient’s status, current treatment, and required support, including current cuff pressure control and monitoring parameters. It provides transparency by supporting protocolized care – so you can rest assured that IntelliCuff® continues to optimize cuff pressure at all times.

By integrating IntelliCuff® into HAMILTON MEDICAL’s unique intuitive user interface, you can focus your attention on your patients. There is no longer the need to manage two different systems or master additional user interfaces.

Pcuff and Dynamic Lung
The Ventilation Cockpit provides a unique, intuitive and efficient way to monitor the patient’s lung condition and cuff pressure in real time.

One user interface
IntelliCuff® is an integrated part of the configurable Ventilation Cockpit, giving you full access to cuff pressure controls.

Perfectly integrated solution
The automatic cuff pressure module is integrated into the ventilator and is externally visible. Just connect the cuff tubing to the ventilator and focus on your patients, not extra devices.

IntelliCuff® is a fully integrated solution designed to reduce the clinical staff’s workload and minimize complexity in the ICU.

References:
1. Sole ML et al. AJCC, 2011 March, Volume 20
2. Nseir S et al. AJRCCM, 12-10-11 23:38:49
IntelliCuff® ensures optimal cuff pressure—helping to avoid VAP and tracheal injuries.

Optimal cuff pressure with IntelliCuff®

Over-inflated cuff

Under-inflated cuff

How IntelliCuff® works
IntelliCuff® is designed for immediate use, no calibration is required. It operates in different modes, allowing the operator to find suitable solutions for most clinical situations. Clinicians can choose between a manual setting for constant cuff pressure—which is then maintained automatically—or automatic cuff pressure adjustments that vary depending on actual ventilating pressures. Simply set the cuff pressure relative to the average airway pressure (Ppeak). The difference between Ppeak and Pcuff will be kept constant to provide a tight sealing cuff.

The applied cuff pressure will vary safely between the adjustable minimum and maximum pressure limits set by the operator or will be maintained at a constant pressure so that excessive or low pressure will be avoided. This prevents aspiration and reduces the risk of tracheal ischemic complications. The integrated ventilator cuff pressure controller issues an alarm when a leaking cuff or disconnected tubing is detected.

Disposable tubing is designed to fit the cuff pressure measurement connector and the ET tube or the tracheostomy tube. The shut-off valve prevents loss of cuff pressure. The cuff can be fully deflated for intubation and extubation.

Improve patient outcome with IntelliCuff®
Continuous optimized and controlled cuff pressure supports ventilation therapy and protects your patients against Ventilator Associated Pneumonia (VAP) and tracheal injuries. Thanks to its intuitive user interface, the IntelliCuff® fully integrated continuous cuff pressure control solution helps to reduce your clinical staff’s workload. IntelliCuff® is an integrated solution and provides major improvements in all conventional ventilation modes.

Available disposables:
Cuff pressure tubes (prevent loss of cuff pressure control) REF 282016/00

The Ventilation Cockpit

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Available disposables:
Cuff pressure tubes (prevent loss of cuff pressure control) REF 282016/00
Prevents and controls VAP and tracheal injuries
Integrated cuff pressure module, no need for external device handling
Provides continuous real-time monitoring of optimal cuff pressure during the entire ventilation period
Supports and optimizes mechanical ventilation therapy

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