smiths medical
bringing technology to life

Suction Above the Cuff Tracheal Tube

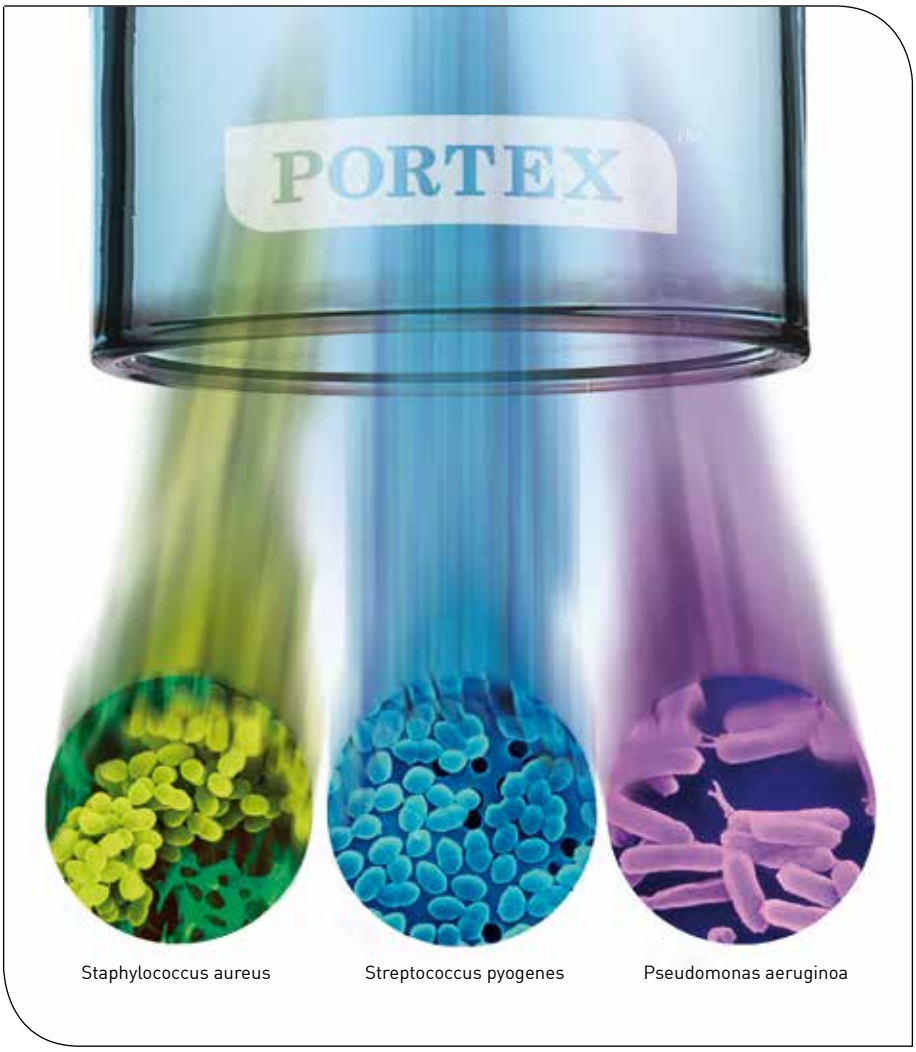
SACETT® - a critical part of your VAP procedure

AIRWAY MANAGEMENT

PORTEX®

PORTEX®

Understanding the problem



Understanding the problem

The need for mechanical ventilation is frequently the primary reason for admission into an intensive care unit (ICU). Though ventilation in these cases is essential for the immediate preservation of life, it does carry with it an element of risk. Critically ill patients in ICU are at high risk from infections associated with increased morbidity, mortality, and health care costs[1-3]. The overall infection rate in critically ill patients approaches 40% and may be as high as 50% or 60% in patients who remain in the ICU for more than 5 days[4,5]. The incidence of pneumonia acquired in the ICU ranges from 10% to 65%[6-11]. Among patients at high risk from ventilator-associated pneumonia (VAP) are those who have chronic obstructive pulmonary disease, burns, neurosurgical conditions, acute respiratory distress syndrome, and witnessed aspiration; those who are re-intubated; and those who receive paralytic agents or enteral nutrition[12,13].

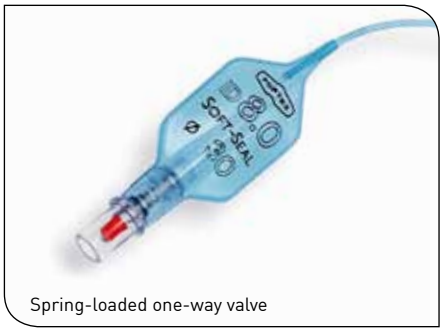
The attributable morbidity and mortality of VAP are clinically significant. In a prospective, matched cohort study, patients with VAP remained in the ICU 4.3 days (95% CI, 1.5 to 7.0 days) longer than patients who did not have VAP and had a trend toward an increased risk for death (absolute risk increase, 5.8% [CI, -2.4% to 14.0%])[14]. Six other studies using a matching strategy found a prolonged length of ICU stay associated with VAP (range, 5 to 13 days) and attributable mortality ranging from an absolute risk increase of 0% to 50%[15-20].

Safdar et al (2005)[21], evaluating the clinical and economic consequences of ventilator-associated pneumonia concluded:

a) between 10% and 20% of patients receiving >48 hrs of mechanical ventilation will develop VAP.
b) critically ill patients who develop VAP appear to be twice as likely to die compared with similar patients without VAP (pooled odds ratio, 2.03; 95% confidence interval, 1.16-3.56).
c) patients with VAP have significantly longer intensive care unit lengths of stay (mean = 6.10 days; 95% confidence interval, 5.32-6.87 days).
d) patients who develop VAP incur up to USD $10,019 in additional hospital costs.

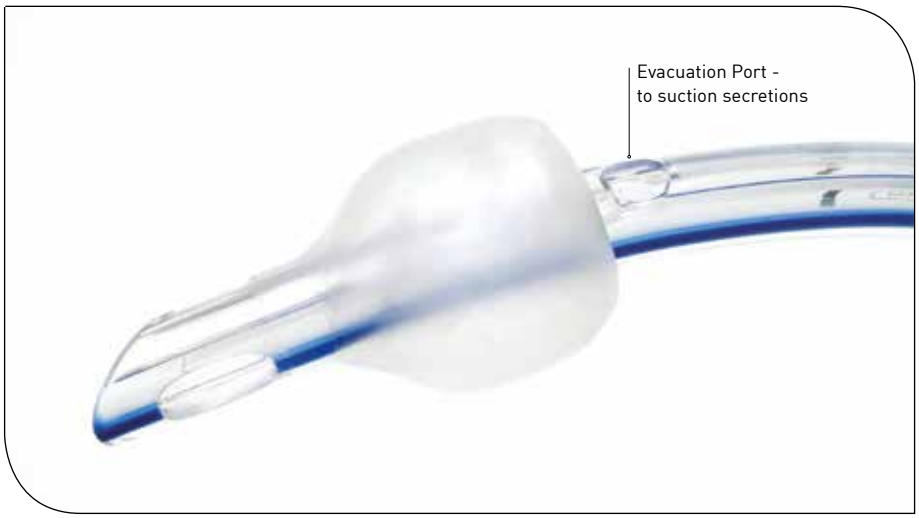
Therefore, strategies to decrease the incidence of VAP could decrease morbidity, mortality, and health care costs and improve patient safety[22]


Soft-Seal® Reverse Cuff



Spring-loaded one-way valve


Suction Cap



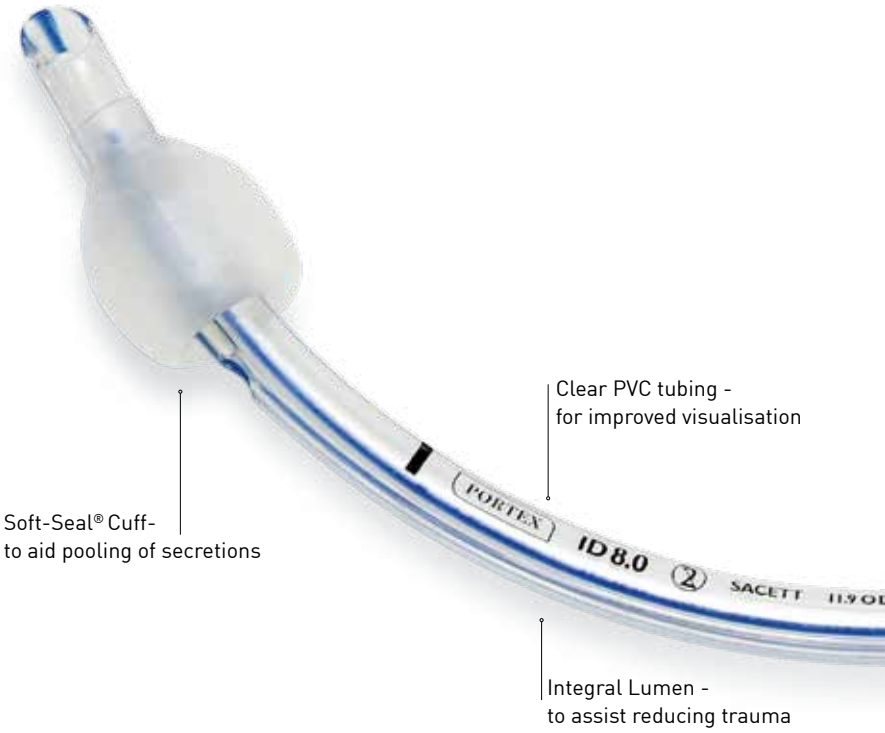
Key features of SACETT®

- Blue Line® cuffed tracheal tube features the high-volume, low-pressure Soft-Seal® reverse cuff can assist in increasing patient comfort and aids pooling of secretions for aspiration.
- Spring-loaded, one-way valve helps ensure cuff inflation and integrity. The large ergonomic pilot balloon makes it easier to distinguish between the sound of suction and that of a cuff leak.
- Posterior aspiration opening and additional lumen leading to a proximal line for connection to suction sources. The integral lumen reducing risk of potential trauma and risk of infection introduction associated with manual catheter suctioning.
- Clear PVC to allow visualisation of misting and confirm correct placement
- Yellow coded suction line and connector for easy identification and prevention of accidental cutting.
- Suction line cap to prevent contaminants entering the lumen when suction is suspended (e.g. during patient transport).

Used as part of a well implemented reduction protocol, CASS has been shown to reduce the incidence of VAP [24-25]. The Portex® Suction Above the Cuff Tracheal Tube has been optimised for the successful application of CASS for the reduction of VAP incidence.

PORTEX®

SACETT® Suction Above The Cuff Tracheal Tube



Your Expertise

The prophylaxis of VAP has been shown to be best achieved via a combination of strategies combined into a workable local protocol. Common protocols include the following elements:

- Identification of patients at risk
- Early and accurate diagnosis
- Sedation interruption/earliest extubation
- Semi-recumbent positioning
- Continuous aspiration of subglottic secretions (CASS)
- Closed suctioning system
- Routine Oral Care / Hygiene
- Minimising nasogastric intubation/ extubation
- Reduction in ventilator circuit changes
- Stress ulcer prophylaxis
- Continuous lateral rotation

Working with your local microbiology and infection control experts these strategies can be combined to reduce the incidence of VAP within your institution.

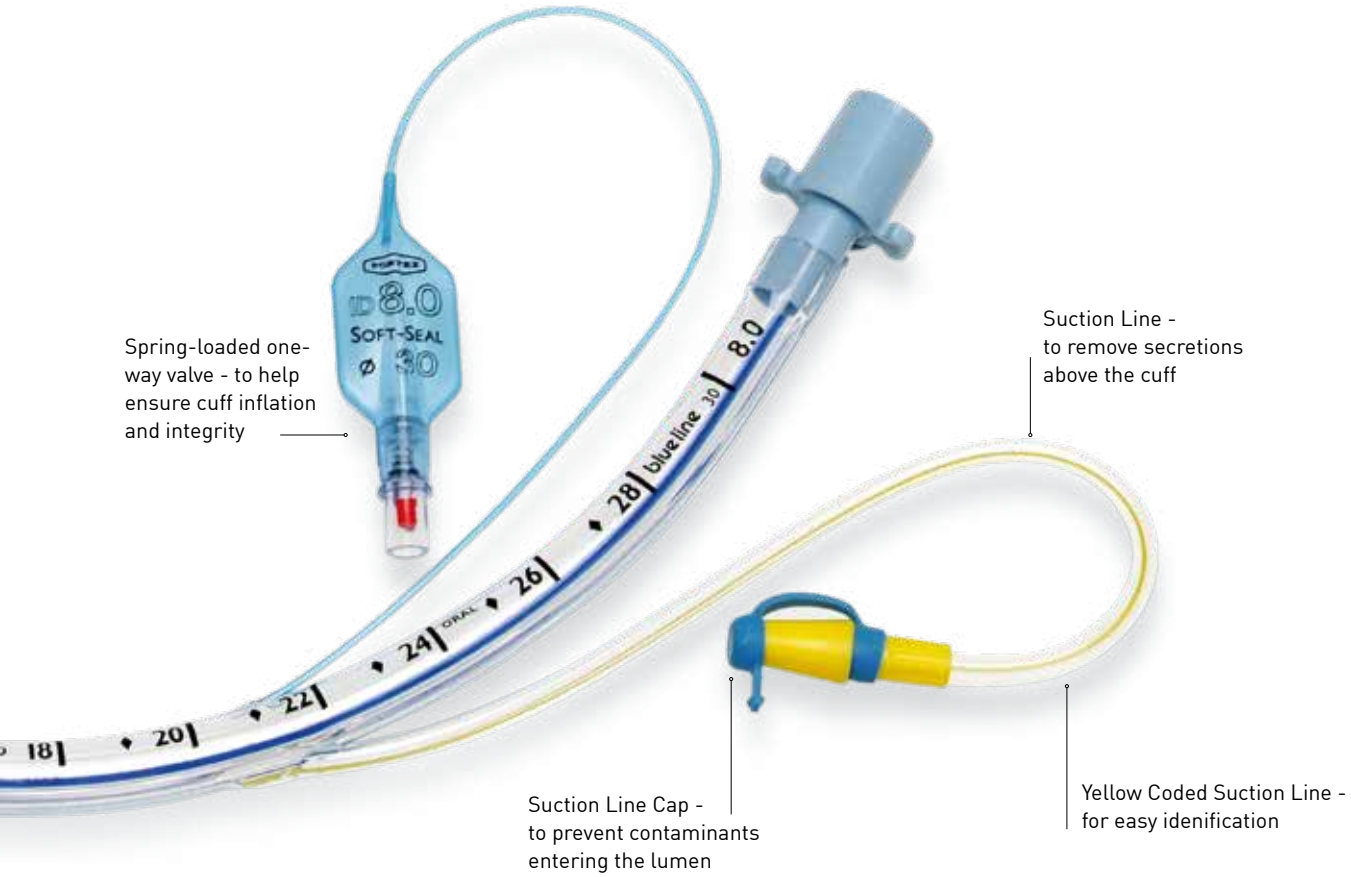
Our Expertise

Continuous subglottic aspiration removes oropharyngeal and/or gastric secretions from above the cuff of an endotracheal or tracheostomy tube which may have been contaminated /colonised by pathogenic organisms. Micro-aspiration of these secretions is believed to be a primary factor in the development of VAP. Although aspiration can be performed via scheduled intervention (with the risk of vocal cord damage or the introduction of infection), Smiths Medical has used the experience gained from Blue Line Ultra® Suctionaid® to develop SACETT®.

SACETT®

The Portex® Suction Above the Cuff Tracheal Tube (SACETT®) is a new addition to the Blue Line® range of tracheal tubes, specifically designed to reduce VAP. SACETT® combines all the quality features of the Blue Line® range with the ability to remove secretions from above the cuff while leaving the tube in-situ. This is accomplished via the incorporation of an additional posterior lumen with an evacuation opening above the cuff to allow continuous aspiration of subglottic secretions (CASS).

The unique feature of SACETT® is the incorporation of the high-volume, low pressure Soft-Seal® reverse cuff which can assist in increasing patient comfort.
Its reliable seal is also shaped to encourage secretions to pool around the evacuation opening.



ORDERING INFORMATION

SACETT®	I.D.(mm)	O.D.(mm)	Cuff resting diam.(mm)
100/189/060	6.0	9.0	23.0
100/189/065	6.5	9.7	23.0
100/189/070	7.0	10.4	30.0
100/189/075	7.5	11.1	30.0
100/189/080	8.0	11.9	30.0
100/189/085	8.5	12.4	30.0
100/189/090	9.0	12.8	30.0

PORTEX®

Our Portfolio of VAP reducing solutions

Blue Line Ultra® Suctionaid®

Blue Line Ultra® Suctionaid® tube features an integral suction lumen to aid removal of secretions from above the cuff. Thermosensitive PVC – provides sufficient rigidity for initial insertion, and then softens at body temperature to accommodate individual patient anatomy

- 105° angle for comfort in-situ
- Tube is suitably radiopaque to enable confirmation of tube position
- Soft-Seal® cuff – velvet soft; low pressure, high volume cuff, with larger cuff resting diameter
- Clear markings on pilot balloon provide relevant information
- Flange is soft for maximum patient comfort, and clear to ensure aesthetic acceptability
- Obturator features special clip design to minimise tube tip movement during insertion
- Inner cannula designed to be robust and easy to use. Ring pull design aids smooth insertion and removal from tube, minimising patient trauma
- Size of inner cannula indicated to avoid errors in use
- Also available in an UltraPerc® PDT kit

SuctionPro 72™

The Portex® SuctionPro 72™ Closed Ventilation Suction System is a single patient use suctioning device for the removal of secretions from the tracheobronchial tree of ventilator dependent adult patient – intended for up to 72 hours use.

- Up to 3-day recommended duration of use
- Clear pathway evacuation port
- Lockable thumb valve end cap
- Patient label with day of the week stickers
- Clear T piece for visualisation of the pathway
- Soft catheter sleeve
- Trac-Wedge™ device to aid in disconnection of the catheter from the patient's endotracheal or tracheostomy tube
- Swivel connector available to reduce torque to patient
- Sterile, single patient use
- MDI adaptor
- Coloured day labels

PressureEasy®

The PressureEasy® Cuff Pressure Controller is designed to continuously monitor tracheal cuff pressure. Its indicator window signals cuff pressure is maintained between 20-30cm/H2O. In addition, the airway pressure auto-feedback feature boosts cuff pressure to ensure proper sealing when high pressures are used during ventilation.

- Monitors endotracheal cuff pressure level between 20-30cm/ H2O
- Guards against aspiration and tracheal damage
- Pressure feedback line designed to eliminate cuff leaks at peak inspiratory pressure

Portex® Mini-Trach II Seldinger Kit

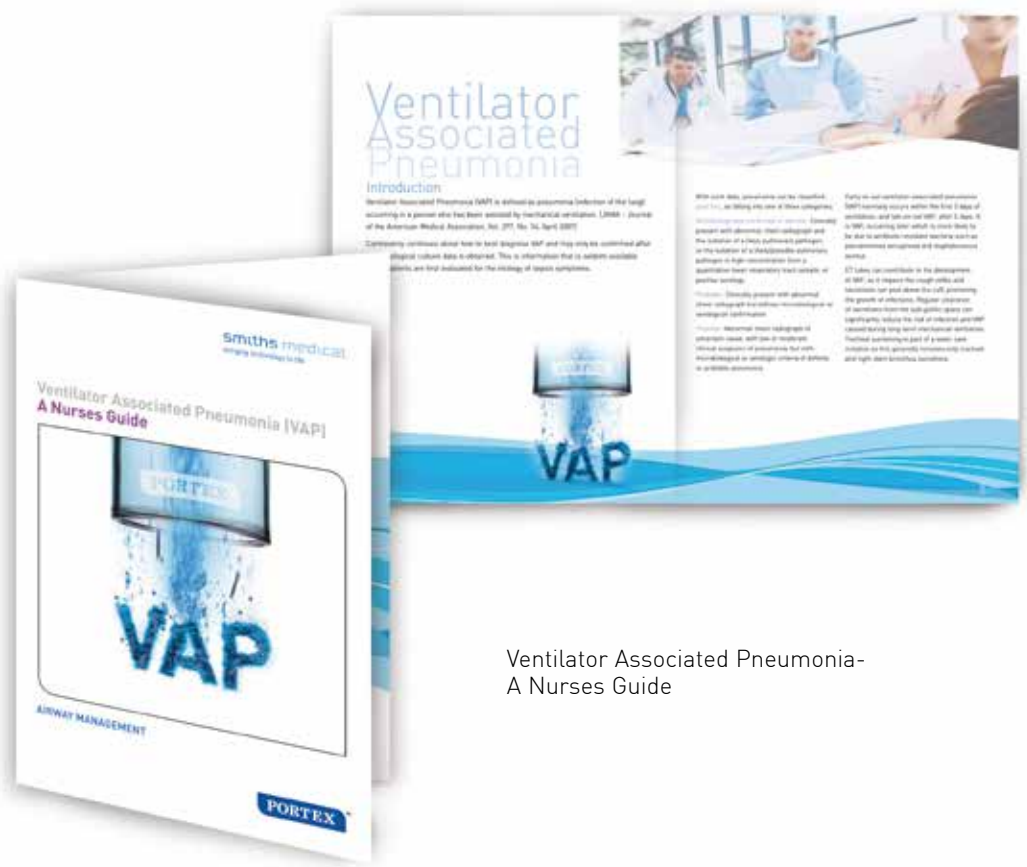
For therapeutic insertion in Theatre, Intensive Care or Ward

- Guarded scalpel to make initial midline skin incision
- 16G bevelled needle allows simple puncture of the cricothyroid membrane
- Aspirating syringe allows confirmation of correct needle placement
- Flexible tipped guidewire helps introduction of dilator without trauma to posterior tracheal wall
- Curved dilator expands the opening to permit smooth insertion of the Portex® Mini-Trach cannula
- Introducer guides the cannula into the trachea
- 4.0mm ID soft PVC cannula provides access to the trachea both as an airway and for suctioning
- 15mm connector allows standard connection to breathing systems
- 10F low friction suction catheter allows immediate initial suctioning following cannulation

TBA Care® Suction Alert

The complications of suctioning are well documented[26] and the trauma of being suctioned is often remembered by the patient following their discharge from Critical Care [27-32]. The advantages of using TBA Care® Suction Alert are;

- To suction the patient's airway only when necessary
- Maintains stable vital signs
- Improves ventilation
- Reduce the complications of "ineffective airway clearance"
- Gives the option to listen to the patient's airway and confirm the presence of secretions



Ventilator Associated Pneumonia-
A Nurses Guide

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