

Hot Technology
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Endotracheal Tube to Reduce Infections

This technology provides several improvements to endotracheal tubes that reduce infections including ventilator-associated pneumonia:

- An endotracheal tube (ETT) cleaning device (aka mucus shaver) is presented that cleans the interior of ETTs.
- An ETT has a suction device (mucus slurper) at the distal end to remove mucus outside the ETT.
- An ETT is fitted with a two layer cuff instead of a one layer cuff to minimize leakage past the cuff within the patient.
- A thin-walled ETT increases the interior air capacity without widening the outside diameter, making breathing easier for patients.

The mucus shaver has been used in one clinical trial in Italy and will be tested again soon in the same hospital. The thin-walled tube already is patented, licensed and marketed for infants. Overall, the market is very large. The technology may be incorporated in ETTs used in the U.S. and abroad, especially for ETTs used in patients incubated for greater than 24-48 hours.

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