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## Effect of the endotracheal tube with subglottic suction port vs standard endotracheal tube on the incidence of ventilator-associated pneumonia in patients of organophosphate poisoning

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rentilator-associated pneumonia (VAP) is a hospital-acquired infection that develops after 48 hours or more after a patient is intubated with an endotracheal or tracheostomy tube and is put on mechanical ventilation. Ventilator-associated pneumonia is a most common nosocomial infection in ICU and associated with prolonged hospitalization, increased health care costs, and high attributable mortality. Intubation independently increases the risk of developing nosocomial pneumonia at least sevenfold with a peak incidence occurring around day five of ventilation. Tracheal intubation thwarts cough reflex, compromises mucociliary clearance, injures tracheal epithelial surface, provides a direct conduit for rapid access of bacteria from upper into the lower respiratory tract and allows the formation of biofilm on the endotracheal (ET) tube surface. The combination of these factors puts the mechanically ventilated patient at great risk of developing VAP. In view of this, we have studied the incidence of VAP in ET tube with subglottic suction port versus standard ET tube in cases of organophosphorus (OP) poisoning in IJM Medical College, Davangere from December 2015-June 2017. Patients who have presented with organophosphorus poisoning between the age group of 18 to 60 years who require ventilator support, intubated with standard ET tube and another subset of patients intubated with ET tube with subglottic suction port were analyzed. In this study, we found that distribution of various organisms with regard to sputum culture in both groups was pseudomonas being maximum and Proteus was found in minimum percentage. When a subglottic suction port is used we observed improved patients were 70% and death were 30%. When a subglottic suction port is not used we observed improved were 55% and death were 45%. Thus, based on our observations, VAP is common in patients who are intubated in ICU, which has higher morbidity and mortality among these patients. In our study, we observed that atropine usually decreases secretions, but here in this study patient population who were admitted developed secretions instead of adequate atropine dosage and also developed VAP. Use of ET tube with subglottic suction drainage may prevent VAP in cases of Organophosphorus poisoning and also improves patient outcomes.

## Biography

Varun Koushik Nanna did MBBS in a prestigious Sichuan Medical University, Chengdu, Western China. Presently he is doing post graduate resident in the Department of Emergency Medicine, JJM Medical College, Davanagere, Karnataka, India. He has an expertise in emergency and trauma cases and also in clinical toxicology.

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