Value of bedside lung ultrasound in diagnosis of ventilator associated pneumonia in critically ill patient

Thesis Submitted for Fulfillment of doctorate Degree In critical care by

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Abstract

Ventilator-associated pneumonia (VAP) is defined as pneumonia that occurs 48-72 hours or thereafter following endotracheal intubation, characterized by the presence of a new or progressive infiltrate, signs of systemic infection (fever, altered white blood cell count), changes in sputum characteristics, and detection of a causative agent **(American Thoracic Society, Infectious Diseases Society of America, 2005).**

VAP is estimated to occur in 9-27 % of all mechanically ventilated patients, with the highest risk being early in the course of hospitalization **(Chastre and Fagon, 2002 and American Thoracic Society, Infectious Diseases Society of America, 2005).** It is the second most common nosocomial infection in the intensive care unit (ICU) and the most common in mechanically ventilated patients (***Hunter, 2012 and Afshari et al., 2012)***.

In developing countries, VAP occurs in up to 30 % of critically ill patients on mechanical ventilation and the mean rate of VAP varies from 10 to 41.7 cases per 1000 ventilator days **(Arabi et al., 2008; Lipovy et al., 2011; Rosenthal et al., 2012)**.

Key words: **bedside lung ultrasound in diagnosis of ventilator associated**