

## [ 摘要 ]

本研究主要在探討口腔分泌物抽對降低呼吸器相關性肺炎 (ventilator-associated pneumonia, VAP) 之成效。採 historical comparison study 之研究設計，經醫院人體試驗倫理委員會審查通過後，在北部某醫學中心內外科加護病房選取符合收案條件的病患為對象，並經說明同意參與研究者方才收案。共收集對照組 159 例與口腔分泌物抽吸組 102 例。對口腔分泌物抽吸組個案採取不完全仰臥與翻身前抽吸口腔分泌物之介入性措施，至於對照組個案則進行傳統之護理措施。研究工具包括基本資料表、口腔分泌物抽取量收案單，對口腔分泌物抽吸組個案進行為期五天之介入性研究。所得資料以 SPSS 10.0 版套裝軟體進行建檔與統計分析，以 Chi-square test、independent-t test 檢定兩組病患基本資料及疾病資料之差異性，以 repeated measures ANOVA 精確評估口腔分泌物量對發生 VAP 之影響。研究結果顯示，對照組病患發生 VAP 之百分比為 24/159(15.0%)，遠高於口腔分泌物抽吸組病患之 5/102(4.9%)，具統計之顯著意義 ( $p=0.014$ )。對照組發生 VAP 之危險因子為使用噴霧治療與重插管，具統計顯著意義( $p$  值分別為 0.005 與 0.004)，反之，上述因子並不是口腔分泌物抽吸組病患之危險因子，均未達統計上顯著意義( $p$  值分別為 0.25 與 0.48)，其它背景資料都無顯著差異。由此可知，藉由口腔分泌物抽吸確可降低 VAP 之發生率。

口腔分泌物抽吸之介入措施，除可降低 VAP 之發生率外，對已發生 VAP 之病患更可降低其死亡率，進一步縮短加護病房住院天數、插管天數與呼吸器使用天數，故此介入性措施或值得推廣於使用呼吸器病患，以降低醫療成本與提昇醫療品質。

## [ 英文摘要 ]

The purpose of this study was to explore the effect of nursing intervention, aspiration oral secretion on reducing ventilator-associated pneumonia (VAP). It was a historical comparison study including 159 control subjects and 102 studied subjects from medical and surgical intensive care units (ICU) of a medical center in Taipei. The Institutional Review Board of the hospital approved the study, and informed consent was obtained from the patient or, if this was not possible, from a representative of the family. Patients in the studied group received suction of oral secretion before each positional changing and avoidance of supine position. Patients in the control group were cared as usual.

The results indicated that occurrence of VAP was found in 24 of 159 (15.0%) patients in control group and in 5 of 102 (4.9%) patients in study group. The difference in the occurrence of VAP between the two groups was statistically significant ( $p = 0.014$ ). In the control group, the risk factors for developing VAP included inhalation therapy and re-intubation of endotracheal tube ( $p = 0.005$  and  $0.004$ , respectively). The others clinical data showed no significant difference.

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In conclusion, the present study indicated that aspiration of oral secretion and management of body position could significantly reduce the occurrence of VAP. The rate of mortality, the stay in ICU, and duration of mechanical ventilation were markedly reduced. This intervention is worthy of applying to the patients on ventilator by nurses and doctors as part of routine practice.