

Using evidence-based interventional abdominal massage to reduce ICU VAP infection density

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Introduction

VAP refers to lung parenchymal infection in patients exposed to invasive mechanical ventilation for at least 48 hours. It is one of the common pneumonias in ICU. VAP remains one of the most common infections in patients requiring invasive mechanical ventilation (Papazian, & Luyt, 2020). Statistics on the ICU VAP infection density of a regional hospital in northern Taiwan from January 1/2021 to December 31/2021, show that the infection density of ICU VAP in a regional hospital in northern Taiwan is 4.6‰. Therefore, this is used to empirically explore the gastrointestinal induction induced by abdominal massage. Whether peristalsis can effectively reduce VAP infection density. This article aims to reduce the density of VAP infection through empirical interventional abdominal massage to improve the quality of hospital care for ICU patients.

Methods

The research design adopted an experimental interventional research design. The literature was searched from January 2015 to December 2020. Using ICU and Ventilator associated pneumonia as keywords, the databases PubMed, MEDLINE, EMBASE, EBSCO, etc. were searched systematically. A comprehensive electronic literature search was performed and Bollinger logic was used to search. Synonyms were intersected with OR, and keywords were intersected with AND. After entering the database search, the title and abstract relevance of the obtained articles were checked one by one, and 165 articles were found. articles, and finally 3 studies were selected to meet the inclusion criteria. After the empirical literature search process, the intervention plan was mainly based on the intervention method in this article by Papazian, & Luyt (2020), from January 15, 2022 to 2022. The case was accepted on June 15, 2020. Inclusion conditions: age 60-90 years old, APACHE II score >16 points, respirator use for ≥ 48 hours, and NG tube feeding and feeding, and hospitalization days of at least 7 days. All patients who use respirators the patient underwent abdominal massage twice a day for 15 minutes each time.

Results

A total of 62 subjects participated in the study. After empirical intervention, the results showed that the VAP infection density dropped from 4.6 ‰ to 2.1‰. Abdominal massage is indeed significantly effective in preventing the increase in gastric residual volume, abdominal distension and VAP ($p < 0.001$).

Conclusions

Current research does not have unified diagnostic standards and treatment measures for VAP, making the results lack accuracy. Therefore, further studies with larger samples and a standard definition of VAP are needed to better prevent the occurrence of VAP. Through evidence-based intervention, abdominal massage can effectively reduce gastric residual volume, abdominal distension and the incidence of Ventilator-associated pneumonia in patients using ventilators. Abdominal massage is a simple, safe, cost-effective and cost-effective method. It is recommended to be promoted to other intensive care units to Reduce VAP infection density.

References

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