Supplementary material

Studies excluded and reasons

Reviews without meta-analysis:

1. Blot SI, Poelaert J, Kollef M. How to avoid microaspiration? A key element for the prevention of ventilator-associated pneumonia in intubated ICU patients. *BMC Infectious Diseases.* 2014;14(1).
2. DePew CL, McCarthy MS. Subglottic secretion drainage: A literature review. *AACN Advanced Critical Care.* 2007;18(4): 366-379.
3. Williams TA. Is the evidence for the use of subglottic drainage to prevent ventilated-associated pneumonia sufficient to change practice? *Australian Critical Care.* 2012;25(3): 200-204.
4. Lacherade JC, Azais MA, Pouplet C, Colin G. Subglottic secretion drainage for ventilator-associated pneumonia prevention: an underused efficient measure. *Ann Transl Med.* 2018;6(21): 422.
5. Scherzer R. Subglottic secretion aspiration in the prevention of ventilator-associated pneumonia: A review of the literature. *Dimensions of Critical Care Nursing.* 2010;29(6): 276-280.

There no was control group without SSD:

6. Wen Z, Zhang H, Ding J, Wang Z, Shen M. Continuous versus intermittent subglottic secretion drainage to prevent ventilator-associated pneumonia: A systematic review. *Critical Care Nurse.* 2017;37(5): e10-e17.
7. Fujimoto H, Yamaguchi O, Hayami H, Shimosaka M, Tsuboi S, Sato M, et al. Efficacy of continuous versus intermittent subglottic secretion drainage in preventing ventilator-associated pneumonia in patients requiring mechanical ventilation: a single-center randomized controlled trial. *Oncotarget.* 2018;9(22): 15876-15882.

No RCTs:

8. Walaszek M, Gniadek A, Kolpa M, Wolak Z, Kosiarska A. The effect of subglottic secretion drainage on the incidence of ventilator associated pneumonia. *Biomed Pap Med Fac Univ Palacky Olomouc Czech Repub.* 2017;161(4): 374-380.
9. Lorente L, Lecuona M, Jimenez A, Lorenzo L, Roca I, Cabrera J, et al. Continuous endotracheal tube cuff pressure control system protects against ventilator-associated pneumonia. *Critical care (london, england).* 2014;18(2).

The main intervention was not SSD:

10. Pneumatikos I, Koulouras V, Nathanail C, Goe D, Nakos G. Selective decontamination of subglottic area in mechanically ventilated patients with multiple trauma. *Intensive Care Med.* 2002;28(4): 432-437.
11. Masjedi M, Zand F, Sabetian G, Maghsoudi B, Savaie M. Early replacement of conventional endotracheal tube with endotracheal tube with subglottic suction port for

the new intensive care patients; Preventive or problematic against ventilator associated events? *Journal of pure and applied microbiology.* 2016;10(4): 2655-2662.

Tracheostomy patients:

12. Gentile G. A single-center, randomized controlled study comparing the efficacy of the SIMEX intermittent subglottic aspiration system in the prevention of ventilator-associated pneumonia and ventilator-associated events in long-term, tracheostomized, mechanically-ventilated patients. *Chest*. 2016;150(4): 152A-.
13. Ledgerwood LG, Salgado MD, Black H, Yoneda K, Sievers A, Belafsky PC. Tracheotomy tubes with suction above the cuff reduce the rate of ventilator-associated pneumonia in intensive care unit patients. *Annals of Otology, Rhinology and Laryngology*. 2013;122(1): 3-8.

Only abstract:

14. Koker A, Gok F, Erayman I, et al. Effect of subglottic secretion drainage for preventing ventilator-associated pneumonia. Critical care (london, england) 2014;18:S119-S120.

Not use of endotracheal tube allowing the SSD in the intervention group:

15. Safdari R, Yazdannik A, Abbasi S. Effect of intermittent subglottic secretion drainage on ventilator-associated pneumonia: A clinical trial. (1735-9066 (Print)).