Simex™ Automated Intermittent Subglottic Aspiration System product trial

Patient #1 (ICU Bed 8) – 1/31/18

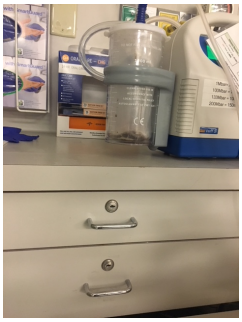
Comments: 300ml on 1/31 but recent picture could not be taken due to sensitivity with family member, so I attached the picture previously taken at 200ml. We will try for another picture this week.

- **Settings:** 15 seconds on, every 15 min, at 200 mbar
- **Outcome**: 400 ml of fluid, very viscous, so it was decided to change the settings.

Patient #2 (CCU) – 1/22/18

Comments: CCU patient final amount was not measured before canister discarded but only hours after introduction to Simex had 100 ml 1/22/18 by 2 PM.

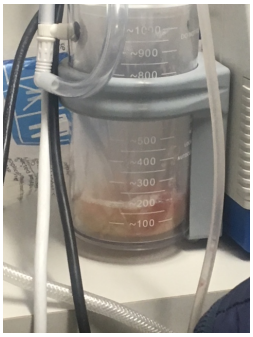
- **Settings:** 15 seconds on, every 15 min, at 200 mbar
- **Outcome**: 400 ml of fluid, very viscous, so it was decided to change the settings.



Patient #3 (ICU Bed 7) – 1/22/18 - 2/1/18

Comments: 75ml of secretions were removed from the patient within hours of being placed on the Simex Machine.

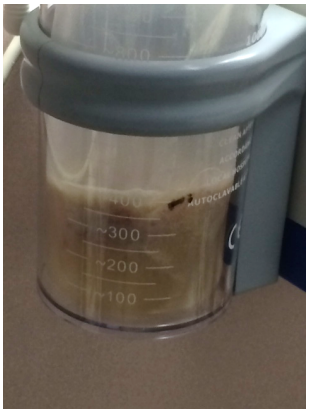
- **Settings:** 15 seconds on, every 15 min, at 200 mbar
- **Outcome**: 200 ml out Start date 1 22/18 130pm. The fluid was viscous so respiratory changed aspiration time to 25 sec at 11PM on 1/23/18.

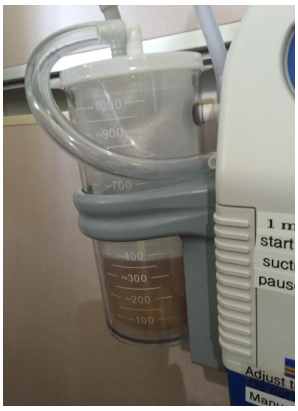


Patient #4 (ICU Bed 10) – 2/9/18 – 2/13/18

Comments: Patient was on wall suction. Simex was placed on the patient starting 2/9/18 in conjunction with Tri Flo adapter realized "2000ml of sputum the next 5 days" ending 2/13/18. *This was confirmed by Respiratory supervisors that two containers of 1000ml were filled and changed during this time*

Settings: 15 seconds on, every 15 min, at 200 mbar.
Outcome: This patient *averaged400ml/day and was transferred to a normal med-surge floor*





Conclusion:

Based upon the data collected, we have concluded that the Simex Subglottic device captures substantially more secretions when compared to standard suctioning techniques. Increased volume of secretions can promote decreased time on the ventilator and expedited weaning.

In addition, Simex fully automated intermittent suctioning, when compared to standard manual suctioning, provided better patient comfort and a less traumatic procedural experience.

Finally, less handling of infectious materials by the nursing staff, and less interaction with those materials, is beneficial to both staff and patients.

Which concludes lower VAP rate or other respiratory infections and a reduction in antibiotics. Substantial cost benefits for hospitals with any patients on a ventilators.