

EAT N GO HOME

Early Assessment and Therapy with NTrainer System help babies to eat well and Go Home faster

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Background

- Extra uterine life is a pathological condition for the preterm infant.
- Preterm infants have increased length of stay (LOS) as they do not eat well.
- Evidence shows that repeated stimulus mimicking non-nutritive suck (NNS) accelerates development of nutritive suck.
- NTrainer system mimics “burst-pause” dynamic of NNS, thus accelerates development of nutritive suck (Innara Health, Retrieved from <http://www.innarahealth.com/>).

PICO Question

In preterm infants 32 weeks to less than 37 weeks, what is the effect of standardized patterned somatosensory oral stimulation on transition to full oral feeds and on LOS, compared to the preterm infants who did not receive the patterned somatosensory oral stimulation?

Appraisal of Evidence

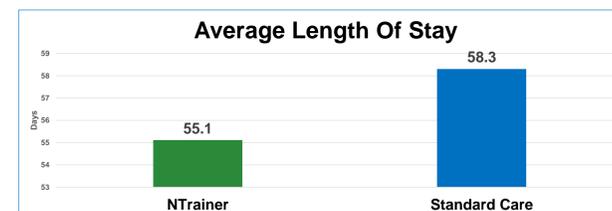
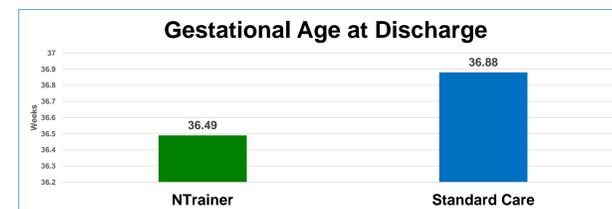
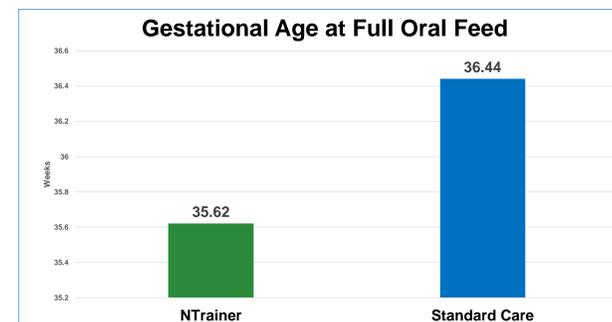
- Comprehensive search of online research databases on standardized patterned somatosensory oral stimulation to foster full feeds revealed
- Repeated stimulus mimicking NNS accelerates development of nutritive suck.
 - NTrainer system help preterm infants to arrive at full oral feeds sooner and decrease hospital LOS (Innara Health, Retrieved from <http://www.innarahealth.com/>).

Implementation

- Using IOWA Model strategy, EBP team evaluated NTrainer system.
- Specially trained team introduced the therapy to preterm infants.
- Pulsed pneumatic stimulation of NNS delivered in three, 3-minute epochs.
- Response was recorded electronically.
- An aggregated data collection compared 10 preterm infants without any stimulus with 10 infants who received therapy with NTrainer system.



Outcomes



Conclusion

The data reflects the NTrainer system is effective for preterm infants to transition into full oral feed, ultimately decreasing their hospital LOS. This study initiated trials of similar therapies and feeding policy changes. However, due to the small sample size, statistically significant results were not seen, therefore this EBP project is ongoing.

Recommendations

- Implement standardized patterned somatosensory oral stimulation therapy to foster full feeds.
- Consider policy change to introduce cue-based feeding earlier than current practice of 34 weeks.
- Further exploration into benefits of non-nutritive suck.

References

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