Background

- Obstructive sleep apnea (OSA) is a highly prevalent cardiorespiratory disease that affects 25-30% of the adult population in the Western world.
- OSA is caused by repetitive collapses of the upper airway.
- The primary existing treatment for OSA is continuous positive airway pressure.

Methodology

- This study compared 8 patients’ standard polysomnogram (control) to their polysomnogram after intranasal administration of 40 i.u. oxytocin.
- Polysomnograms were manually scored by registered polysomnographic technologists, who identified sleep stages, hypopneic and apneic events and arousals.
- MATLAB was used to further analyze the data and identify correlations.
- Heart rate variability analysis was performed to determine the cardiac autonomic balance.

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Direct Patient Impact

- This study shows oxytocin can be a very beneficial treatment for patients with OSA.
- Additional research is needed to determine the mechanisms by which oxytocin promotes positive respiratory changes that reduce the frequency of arousals and level of stress.
- Future studies need to be expanded to include larger populations of patients and use more diverse study parameters (i.e., double blinded).

Apnea and Hypopnea Breakdown

Conclusions

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Acknowledgments