

Effect of Humidification on Titration Pressures in Obstructive Sleep Apnea

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In Submission.

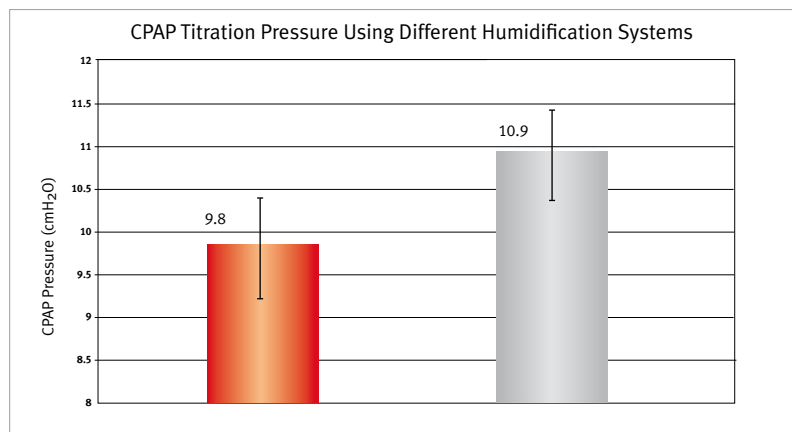
KEY POINTS:

- The use of **ThermoSmart™** Technology led to a titrated CPAP pressure 10% lower than conventional humidification.
- The lower titration pressures seen in this study could be explained by the higher levels of absolute humidity leading to a reduction in nasal airway resistance.

METHODS:

- Twenty sleep apnea patients were randomized to either **ThermoSmart™** or conventional humidification (a humidifier without a heated breathing tube).
- The participants underwent two full nights of Polysomnography (PSG), one on each type of treatment.
- A strict titration protocol was followed on both study nights which also included the use of the same sleep facility, technician and masks.

RESULTS:



KEY:  ThermoSmart™
(Heated Breathing Tube)  Conventional Humidification

CONCLUSIONS:

- In this study, the use of **ThermoSmart™** Technology led to a CPAP titration pressure on average 1.1 cmH₂O lower than conventional humidification.
- The use of **ThermoSmart™** Technology not only lowered titration pressure, but also improved some objective sleep measures.