

## A Summary of:

# NCPAP Acceptance and Compliance is Altered by Humidification

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### TAKE HOME POINTS

- Humidification has a major impact on patients' acceptance and adherence to CPAP therapy.
- Patients using heated humidification report less drying of the upper airways.
- These data support the belief that humidification should be prescribed at onset of therapy in order to reduce the likelihood of dropout.

### AIM

To examine the effects of heated, cool, or no humidification on patient use of nCPAP

### METHOD

50 subjects were recruited.

Researchers employed a randomized parallel design: 18 with heated humidification, 18 with cold pass-over and 14 with no humidification.

Patients were visited after the first, second and third months of treatment and asked to complete a questionnaire regarding nCPAP use, side effects and satisfaction. During these monthly visits patient compliance was covertly recorded.

### RESULTS

Significantly more patients (36%: 5 of 14) abandoned therapy in the no humidification group than in the humidification groups (11%; 2 of 36) (Figure 1)

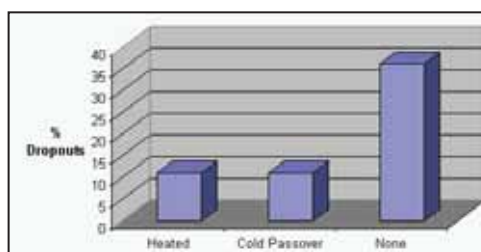


Figure 1: Dropouts (%) at month 3,  $p < 0.001$  heated and cold Passover vs none

At month three, compliance was significantly higher in the humidification groups (4.9 hrs) than in the cold Passover (4.2 hrs) and no humidification group (4.5 hrs;  $p < 0.05$ ).

Self report data showed significantly more complaints of nasal, mouth and throat drying in both the cold pass-over and no humidity groups comparative to the heated humidification group ( $p < 0.05$ ).

At month 3, overall satisfaction and sleepiness did not differ between the three treatment arms, however the heated humidification group reported a significantly improved ability to concentrate ( $p < 0.05$ ).

### CONCLUSIONS

Humidification has a significant impact on patients' acceptance of nCPAP within the first 3 months of therapy. Therefore, prescribing heated humidification with the initiation of nCPAP therapy might lower the incidence of therapy abandonment.

By the third month of therapy, heated humidification resulted in a significant gain in compliance compared to no humidity.

Patients receiving heated humidification report less incidence of upper airway drying.