Assessment of the Clinical Value of an Oscillating Positive Expiratory Pressure (OPEP) Device for Chronic Obstructive Pulmonary Disease (COPD) Patients in India: a 6 week field study using the COPD Assessment Test (CAT)

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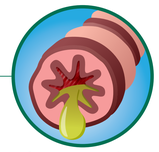
BACKGROUND

Despite multiple drug treatment options available, many COPD patients still suffer from a poor quality of life, often as a result of excess mucus.

This study assessed the quality of life outcomes for COPD patients with mucus hypersecretion in India following treatment with a handheld, easy-to-use OPEP device, using the CAT over a 6 week duration.

Healthy Airway



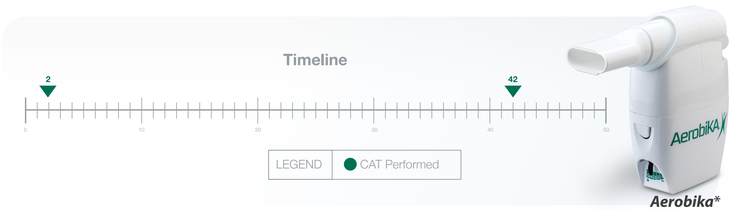
Chronic Bronchitic Airway

METHODS

The clinical assessment was undertaken through 21 pulmonologists across India. COPD patients with mucus hypersecretion (determined via patient consultation) were selected between 40-85 years, having been admitted to hospital with a COPD exacerbation, and who were willing and able to be trained with the OPEP device.

Patients with active cancer, any other chronic disease, history of epilepsy or pregnant/breast feeding were excluded.

All standard of care COPD therapy was maintained during the study. Included patients were prescribed the OPEP device (***Aerobika**** OPEP, Trudell Medical International) upon discharge, with the CAT being performed via a remote call 2 days following discharge (day 0) and six weeks later (day 42).



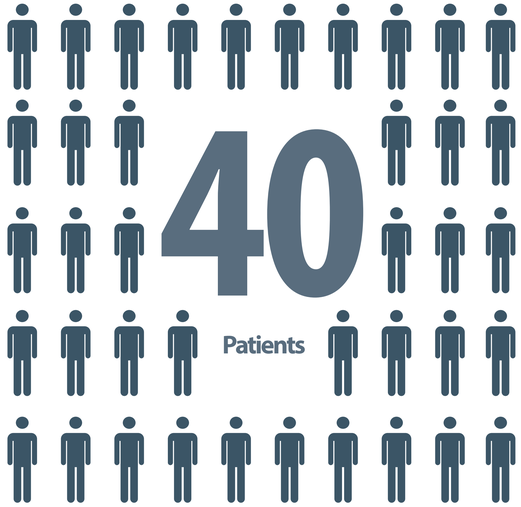
Aerobika* OPEP Device

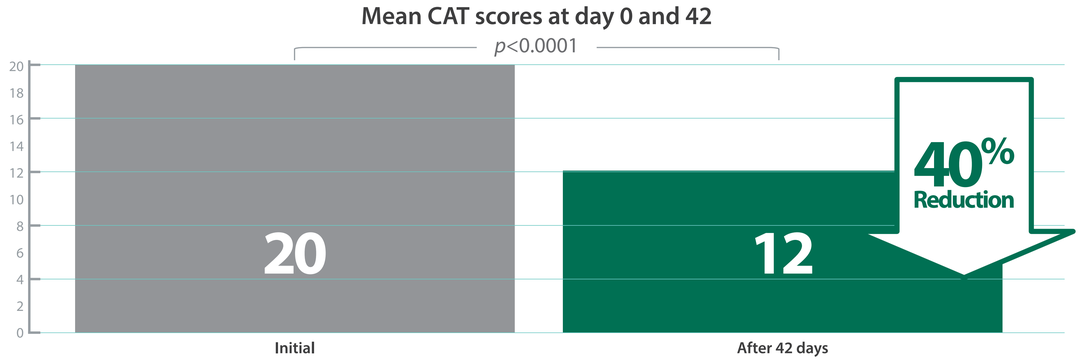
RESULTS

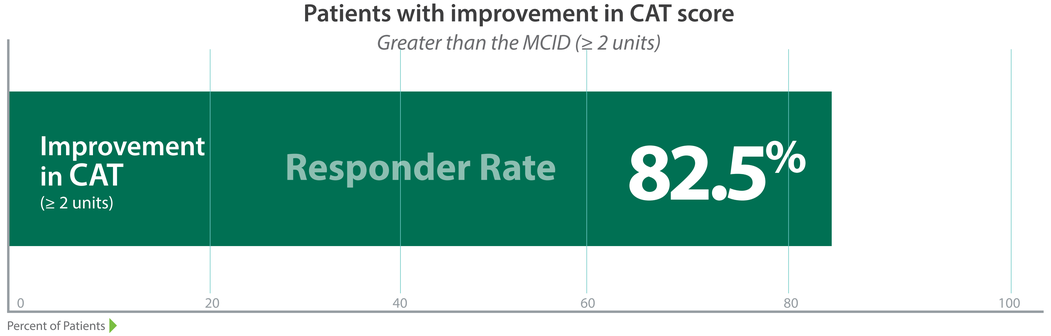
40 patients (29 male) were included in the study.

The mean CAT total score for the 40 COPD patients **improved from 20.0 (initial) to 12.0 (p<0.0001) after 42 days.**

Furthermore, responder rate analysis showed that **82.5% of patients (33/40) had a clinically significant improvement in their total CAT score** (at least 2 units). This improvement was evident regardless of gender.







CONCLUSIONS

For COPD patients being discharged from hospital following exacerbation, the addition of the ***Aerobika**** OPEP device to standard of care was associated with a **clinically and statistically significant improvement in CAT scores from baseline to 6 weeks**.

Notwithstanding the limitations of a relatively small study size and lack of a control, **the results further support the efficacy of this drug free OPEP device with respect to improved quality of life in COPD patients.**

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