**Introduction**

The Epworth sleepiness score (ESS) is the most predictive measure of continuous positive airways pressure (CPAP) response in patients with obstructive sleep apnoea (OSA) with excessive daytime somnolence\(^1\). Even in patients with minimally symptomatic OSA, where symptoms other than sleepiness are predominant, CPAP improves ESS\(^2\).

We aimed to test if other measures of symptoms, in this minimally symptomatic group following CPAP, show greater sensitivity to symptom improvement than the ESS.

**Methods**

In the MOSAIC trial, patients were randomised to either 6 months of CPAP therapy or standard care.

Patients had:
- An ODI >7.5 on original diagnostic study
- Insufficient daytime symptoms to mandate CPAP.

The change from baseline to 6 months, relative to control, for the ESS and several questionnaires were compared.

Patients using CPAP on average >4 hours/night (h/n) were analysed as a separate group.

**Results**

Baseline characteristics for all randomised patients are displayed in Table 1 below. Baseline, 6 month and effect sizes are listed in Table 2 for all outcomes.

<table>
<thead>
<tr>
<th>Standard Care (n=196)</th>
<th>CPAP (n=195)</th>
<th>CPAP &gt;4h/n (n=67)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age in years (SD)</td>
<td>57.6 (7.5)</td>
<td>57.9 (7.2)</td>
</tr>
<tr>
<td>Number male (%)</td>
<td>152 (77.6%)</td>
<td>153 (78.5%)</td>
</tr>
<tr>
<td>Mean BMI kg/m(^2) (SD)</td>
<td>32.5 (5.6)</td>
<td>32.2 (5.6)</td>
</tr>
<tr>
<td>Median ODI events/hour (IQR)</td>
<td>9.4 (5.2, 15.0)</td>
<td>10.2 (4.7, 17.5)</td>
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</tbody>
</table>

**Discussion**

The SAQLI improved the most with CPAP use, showing the largest effect size in the CPAP >4h/n analysis. The ESS, SF-36 Vitality and SF-36 MCS had medium effect sizes in the CPAP >4h/n analysis. There were also small but significant improvements in some of the measures with standard care.

These results suggest that in patients with minimally symptomatic OSA other symptoms may assume greater importance than sleepiness alone.

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**Table 2: Effect sizes for each test.**

* Small (>0.2), ** medium (>0.5), † large (>0.8) effect sizes