Headache outcome measures in medically refractory chronic migraine patients treated with OnabotulinumtoxinA
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Introduction
OnabotulinumtoxinA is standard care of management for chronic migraine (CM). Few studies on the use of OnabotulinumtoxinA on CM have identified factors associated with a positive response to OnabotulinumtoxinA treatment. There are currently no data on outcome measures that might predict subjective perceived outcome (SPO) to OnabotulinumtoxinA in reported by patients with medically-refractory chronic migraine (rCM).

Aim
To identify components of headache characteristics (frequency, intensity, duration) or disability score (Headache Impact Test-6, HIT-6) that predicts SPO.

Method
100 patients who had completed at least two full treatment cycles and had at least six months follow up were identified. Data on SPO, clinical and headache characteristics were collected prospectively on all patients using headache diaries, feedback forms and validated disability scores. Variables analysed for predictors of SPO were headache characteristics (frequency, intensity and duration) and disability score (HIT-6) using multivariate analysis.

Results
Response rates are shown in Fig. 1. Multivariate analysis showed change in pain intensity (p<0.001) and pain duration (p=0.022) were significantly positively associated with SPO. Change in headache days (p=0.294) and HIT-6 score (p=0.321) were not significantly positively associated with SPO. Table 1 shows results of multivariate analysis.

Conclusion
Our data suggest that improvement in pain intensity and headache duration predicts SPO to onabotulinumtoxinA in rCM. The results of this study suggest that for rCM the use of pain intensity and headache duration appear to be the more appropriate outcome measure to assess. The current NICE guidelines which state that response should be assessed using headache days alone may not be appropriate for rCM.

Table 1 (abstract O25). Results of univariate and multivariate analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Univariable Analysis</th>
<th>Multivariable Analysis</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in headache days</td>
<td>0.292</td>
<td>1.126, 0.120</td>
<td>0.294</td>
</tr>
<tr>
<td>Change in pain intensity</td>
<td>0.488</td>
<td>0.539, 0.090</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Change in pain duration</td>
<td>0.303</td>
<td>0.194, 0.083</td>
<td>0.022</td>
</tr>
<tr>
<td>HIT-6 points</td>
<td>0.130</td>
<td>0.216, 0.217</td>
<td>0.321</td>
</tr>
</tbody>
</table>

Dependent Variable: Patient subjective perceived outcome (SPO)