Effects of introvision, a self-regulation method based on a mindfulness-like perception technique in migraine prevention: a randomized waiting-list controlled study

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Objective

Migraine is a brain disorder with recurrent headache attacks and altered sensory processing. We examined the effect of introvision, a self-regulation method based on a mindfulness-like perception technique developed at the university Hamburg in migraine prevention.

Methods

Migraineurs with at least 5 headache days per month were block-randomized to the experimental group (EG) or waiting list group (WL), the latter starting 6 weeks after the EG. Participants learned introvision in 6 weekly on-site group sessions with video-conference support followed by three individual video-conference sessions.

Headache parameters were assessed before introvision and three months after the last individual introvision session.

Results

- 51 patients completed the study. The primary outcome, headache days of the EG after introvision compared to the WL before the introvision, showed no significant effect (11.3+-7.8, n=22; vs. 10.9+-6.2, n=29, p=0.63; Mann-Whitney-U-Test).
- The secondary outcome, comparing pooled EG and WL data before and after introvision, showed significant reduction of headache days, medication intake, HIT-6 scores (Headache Impact Test-6) and increased self-efficacy (FKMS) (see Table 1). Introvision was recommended by 97% of participants.

Table 1

<table>
<thead>
<tr>
<th>Pool EG/WL data</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache days/m</td>
<td>11.5+-6.4</td>
<td>9.8+-7.0</td>
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<tr>
<td>medication days/m</td>
<td>6.4+-4.0</td>
<td>5.2+-4.0</td>
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<tr>
<td>HIT-6</td>
<td>64.3+-4.0</td>
<td>61.2+-5.9</td>
</tr>
<tr>
<td>Self-efficacy (FKMS)</td>
<td>21.7+-7.4</td>
<td>26.3+-6.0</td>
</tr>
<tr>
<td>Headache Intensity (1 weak, 3 strong)</td>
<td>2.1+-0.5</td>
<td>2.0+-0.5</td>
</tr>
</tbody>
</table>

Values given as mean +/- standard deviation. Wilcoxon-paired Test =WPT

Conclusions

- The study did not reach its primary endpoint, likely because of insufficiently balanced groups.
- However, secondary outcome parameters showed an improvement of migraine after the intervention, with a decrease in monthly headache days by 1.7 days/month.

Acknowledgments

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Reference


HMSE-G-SF = FMKS: Fragebogen zum Kopfschmerzmanagement und zur Selbstwirksamkeit.