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

Monika Empl[1,3], Sonja Löser[2], Petra Spille[2], Agnieszka Rozwadowska[1,4], Ruth Ruscheweyh[1], Andreas Straube[1].
1 Department of Neurology, Ludwig-Maximilians-University Munich, Germany, 2 Introvision e.V. Hamburg, Germany, 3 Practice Munich, 4 Department of Neurology, kbo Hospital, Haar, Germany.

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

Pooled EG/WG data	Before	After	
Headache days/m	11,5 +/- 6,4	9,8 +/-7,0	n=49, p=0,003 (WPT)
medication days/m	6,4 +/-4,0	5,2+/-4,0	n=47, p=0,004 (WPT)
HIT-6	64,3+/-4,0	61,2+/-5,9	n=47, p=0,000 (WPT)
Self-efficacy (FKMS)	21,7+/-7,4	26,3+/-6,0	n=46, p=0,000 (WPT)
Headache Intensity (1 weak, 3 strong)	2,1+/- 0,5	2,0+/- 0,5	n.s. (WPT)
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.

Acknowlegments

Reference

Graef J et.al., Language Adaptation of the Headache Management Self-Efficacy Scale (HMSE-G) and Development of a New Short Form (HMSE-G-SF). Headache 2015; 55 :958-72.
HMSE-G-SF = FMKS: Fragebogen zum Kopfschmerzmanagement und zur Selbstwirksamkeit