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Titel des Beitrags:
Differential effectiveness of placebo treatments: a systematic review of migraine prophylaxis.

Abstract:
When analyzing results of randomized clinical trials, the treatment with the greatest specific effect compared with its placebo control is considered to be the most effective one. Although systematic variations of improvements in placebo control groups would have important implications for the interpretation of placebo-controlled trials, the knowledge base on the subject is weak. To investigate whether different types of placebo treatments are associated with different responses using the studies of migraine prophylaxis for this analysis. We searched relevant sources through February 2012 and contacted the authors to identify randomized clinical trials on the prophylaxis of migraine with an observation period of at least 8 weeks after randomization that compared an experimental treatment with a placebo control group. We calculated pooled random-effects estimates according to the type of placebo for the proportions of treatment response. We performed meta-regression analyses to identify sources of heterogeneity. In a network meta-analysis, direct and indirect comparisons within and across trials were combined. Additional analyses were performed for continuous outcomes. Active migraine treatment and the placebo control conditions. Proportion of treatment responders, defined as having an attack frequency reduction of at least 50%. Other available outcomes in
order of preference included a reduction of 50% or greater in migraine days, the number of headache
days, or headache score or a significant improvement as assessed by the patients or their
physicians. Of the 102 eligible trials, 23 could not be included in the meta-analyses owing to
insufficient data. Sham acupuncture (proportion of responders, 0.38 [95% CI, 0.30-0.47]) and sham
surgery (0.58 [0.37-0.77]) were associated with a more pronounced reduction of migraine frequency
than oral pharmacological placebos (0.22 [0.17-0.28]) and were the only significant predictors of
response in placebo groups in multivariable analyses (P = .005 and P = .001, respectively). Network
meta-analysis confirmed that more patients reported response in sham acupuncture groups than in
oral pharmacological placebo groups (odds ratio, 1.88 [95% CI, 1.30-2.72]). Corresponding analyses
for continuous outcomes showed similar findings. Sham acupuncture and sham surgery are
associated with higher responder ratios than oral pharmacological placebos. Clinicians who treat
patients with migraine should be aware that a relevant part of the overall effect they observe in
practice might be due to nonspecific effects and that the size of such effects might differ between
treatment modalities.