

IS THE USE OF PLACEBO ESSENTIAL IN HEADACHE TRIALS? NO

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Normally placebo effects diminish during a few weeks of treatment. In migraine we can observe an adverse effect: even during placebo treatment and even when this manner of treatment is announced, in migraine patients attack frequency will be reduced during placebo treatment. When patients are provided with positive information about the treatment efficacy of both placebo and medication during migraine attacks; more-over: the positive effect persists also during announcing the treatment as placebo (Kam-Hansen et al. 2014). This effect may be explained by a Pavlovian conditioning process, where the expected effect of the treatment results in reducing headaches. This may work like the self-fulfilling-prophecy-theory (Merton 1968), where expectations about the effect of the medication may influence their real impact widely.

My statement above should therefore be modified: Once the medication effect is conditioned, both use of placebo and use of verum medication may result in an improvement of headache. Therefore headache trials should record the opinion of the patients how the medication (verum or placebo) works and how he beliefs and how he expects that the medication works. Additionally the way of communication between physician and patient should be recorded. If the physician is convinced that the medication or the treatment will work, it will work!

Therefore the use of placebo is not essential in headache trials, because all medication will work when it is announced as being efficient and forceful. We should better assess the patient's opinion about the effect of medication and we should distribute the medication with full belief and conviction.

References:

- Kam-Hansen S, Jakubowski M, Kelley JM, Kirsch I, Hoaglin DC, Kaptchuk TJ, Burstein R (2014). Altered placebo and drug labeling changes the outcome of episodic migraine attacks. *Sci Transl Med.* 2014 Jan 8;6(218):218ra5. doi: 10.1126/scitranslmed.3006175.
- Merton, Robert K (1968). *Social Theory and Social Structure*. New York: Free Press. p. 477ff. ISBN 978-0-02-921130-4