A possible effect of methylphenidate on state anxiety: A single dose, placebo controlled, crossover study in a control group

Aviv Segev, Hila Zahava Gvirts, Kevin Strouse, Naama Mayseless, Hagar Gelbard, Yael Doreen Lewis, Yael Barnea, Kfir Feffer, Simone G. Shamay-Tsoory, Yuval Bloch

Psychiatry Research, Volume 241, 30 July 2016, Pages 232-235
DOI: http://dx.doi.org/10.1016/j.psychres.2016.05.009.

Abstract

Methylphenidate affects state-anxiety in ADHD patients. The current study examines the effect of Methylphenidate on state-anxiety in healthy subjects. In a cross-over, randomized, controlled, double-blind study, 36 healthy subjects received either Methylphenidate or placebo. As a group, no change in state-anxiety was detected with Methylphenidate. However, participants reporting higher anxiety levels experienced a significant and specific state-anxiety reduction following Methylphenidate. Moreover, a strong negative correlation was found between the initial-level of anxiety and net-change in state-anxiety. These changes were unrelated to self-perceived attention levels. Our results point to the state-dependent effects of Methylphenidate on anxiety.