Effects of Group Psychotherapy, Individual Counseling, Methylphenidate, and Placebo in the Treatment of Adult Attention-Deficit/Hyperactivity Disorder - A Randomized Clinical Trial

Alexandra Philipsen; Thomas Jans; Erika Graf; Swantje Matthies; Patricia Borel; Michael Colla; Laura Gentschow; Daina Langner; Christian Jacob; Silke Groß-Lesch; Esther Sobanski; Barbara Alm; Martina Schumacher-Stien; Michael Roesler; Wolfgang Retz; Petra Retz-Junginger; Bernhard Kis; Mona Abdel-Hamid; Viola Heinrich; Michael Huss; Catherine Kornmann; Arne Bürger; Evgeniy Perlov; Gabriele Ihorst; Michael Schlander; Mathias Berger; Ludger Tebartz van Elst; for the Comparison of Methylphenidate and Psychotherapy in Adult ADHD Study (COMPAS) Consortium

JAMA Psychiatry. (November, 2015)
doi:10.1001/jamapsychiatry.2015.2146

Importance:
Attention-deficit/hyperactivity disorder (ADHD) is a neurodevelopmental disorder with high prevalence in adulthood. There is a recognized need to assess the efficacy of psychotherapy in adult ADHD.

Objective:
To evaluate the efficacy of cognitive behavioral group psychotherapy (GPT) compared with individual clinical management (CM) and that of methylphenidate hydrochloride compared with placebo.

Design, Setting, and Participants:
Prospective, multicenter, randomized clinical trial of 18- to 58-year-old outpatients with ADHD from 7 German study centers. Patients were recruited between January 2007 and August 2010, treatment was finalized in August 2011, and final follow-up assessments occurred in March 2013.

Interventions:
Sessions of GPT and CM were held weekly for the first 12 weeks and monthly thereafter (9 months). Patients received either methylphenidate or placebo for 1 year.

Main Outcomes and Measures:
The primary outcome was the change in the ADHD Index of the Conners Adult ADHD Rating Scale from baseline to the end of the 3-month intensive treatment (blinded observer ratings). Secondary outcomes included ADHD ratings after 1 year, blinded observer ratings using the Clinical Global Impression Scale, and self-ratings of depression.

Results:
Among 1480 prescreened patients, 518 were assessed for eligibility, 433 were centrally randomized, and 419 were analyzed as randomized. After 3 months, the ADHD Index all-group baseline mean of 20.6 improved to adjusted means of 17.6 for GPT and 16.5 for CM, with no significant difference between groups. Methylphenidate (adjusted mean, 16.2) was superior to placebo (adjusted mean, 17.9) (difference, −1.7; 97.5% CI, −3.0 to −0.4; P = .003). After 1 year, treatment effects remained essentially stable. Descriptive analyses showed that methylphenidate was superior to placebo in patients assigned to GPT (difference, −1.7; 95% CI, −3.2 to −0.1; P = .04) or CM (difference, −1.7; 95% CI, −3.3 to −0.2; P = .03). Regarding depression, no significant differences were found. In contrast, GPT was superior to CM for all visits in the Clinical Global Impression global assessment of effectiveness.

Conclusion and Relevance:
Highly structured group intervention did not outperform individual CM with regard to the primary outcome. Psychological interventions resulted in better outcomes during a 1-year period when combined with methylphenidate as compared with placebo.

Trial Registration: isrctn.org Identifier: ISRCTN54096201