

Efficacy of antidepressants in alcohol dependence with and without comorbid depression: a systematic review and meta-analysis

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Background

Antidepressants are commonly used in alcohol dependence to treat comorbid depression and for the potential action of these drugs on some of the underlying mechanisms of alcohol addiction (e.g. serotonin neuronal system (5-HT) is involved in the consumption of alcohol), although the efficacy of the selective serotonergic reuptake inhibitors (SSRI) is unclear (Pettinati, 2001).

Because previous reviews were not focused on comorbid depression (Nunes et al., 2004), we here present a systematic review of the literature of the efficacy of antidepressant drugs in subjects with alcohol dependence disorders with and without a definite diagnosis of comorbid depression.

Methods

A systematic review and meta-analysis of randomized controlled trials (RCTs) comparing antidepressants with placebo were done following the methodology developed by the Cochrane Collaboration and the QUOROM statement. A systematic search was carried out in Medline (Pubmed 1966-April 2010), Embase and Cochrane library. The abstracts were revised to select the eligible publications. The references in selected published articles, reviews and meta-analyses were checked for potential new sources. Two outcome measures: alcohol use, and improvement in depressive symptoms were analysed.

Results

Ten RCTs were included. Studies did not support the efficacy of antidepressant drugs for alcohol dependence (**Figure 1**). In the condition of alcohol dependence with comorbid depression, results of the meta-analysis showed that antidepressants improved depressive symptoms, but not alcohol use (**Figure 2**).

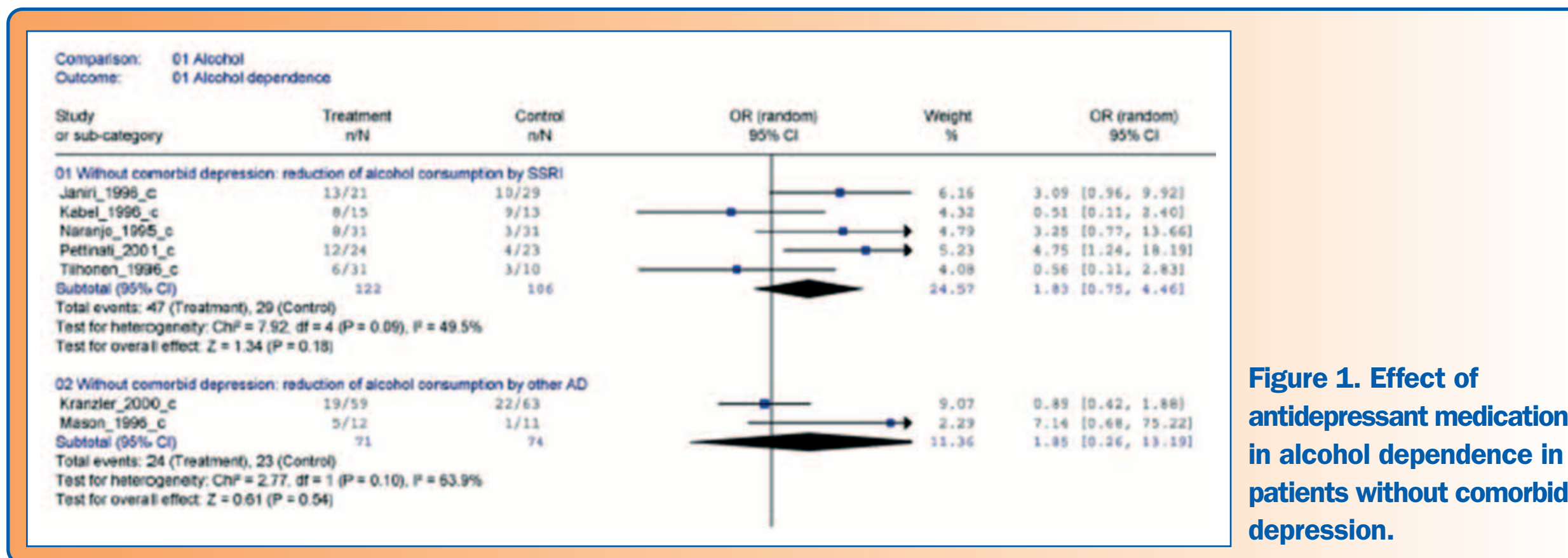


Figure 1. Effect of antidepressant medication in alcohol dependence in patients without comorbid depression.

Conclusions

Although antidepressants are commonly used in alcohol dependence, more studies are needed to confirm its usefulness. SSRI drugs do not seem to offer significant advantages compared with tricyclic drugs. The use of antidepressants in alcohol dependence with comorbid depression needs more studies in well-defined samples, adequate doses and duration of treatment to be really conclusive.

References

- Nunes et al. *JAMA* 2004;291:1887-96.
- Pettinati. *J Clin Psychiatry*; 62 (Suppl. 20): 26-31.

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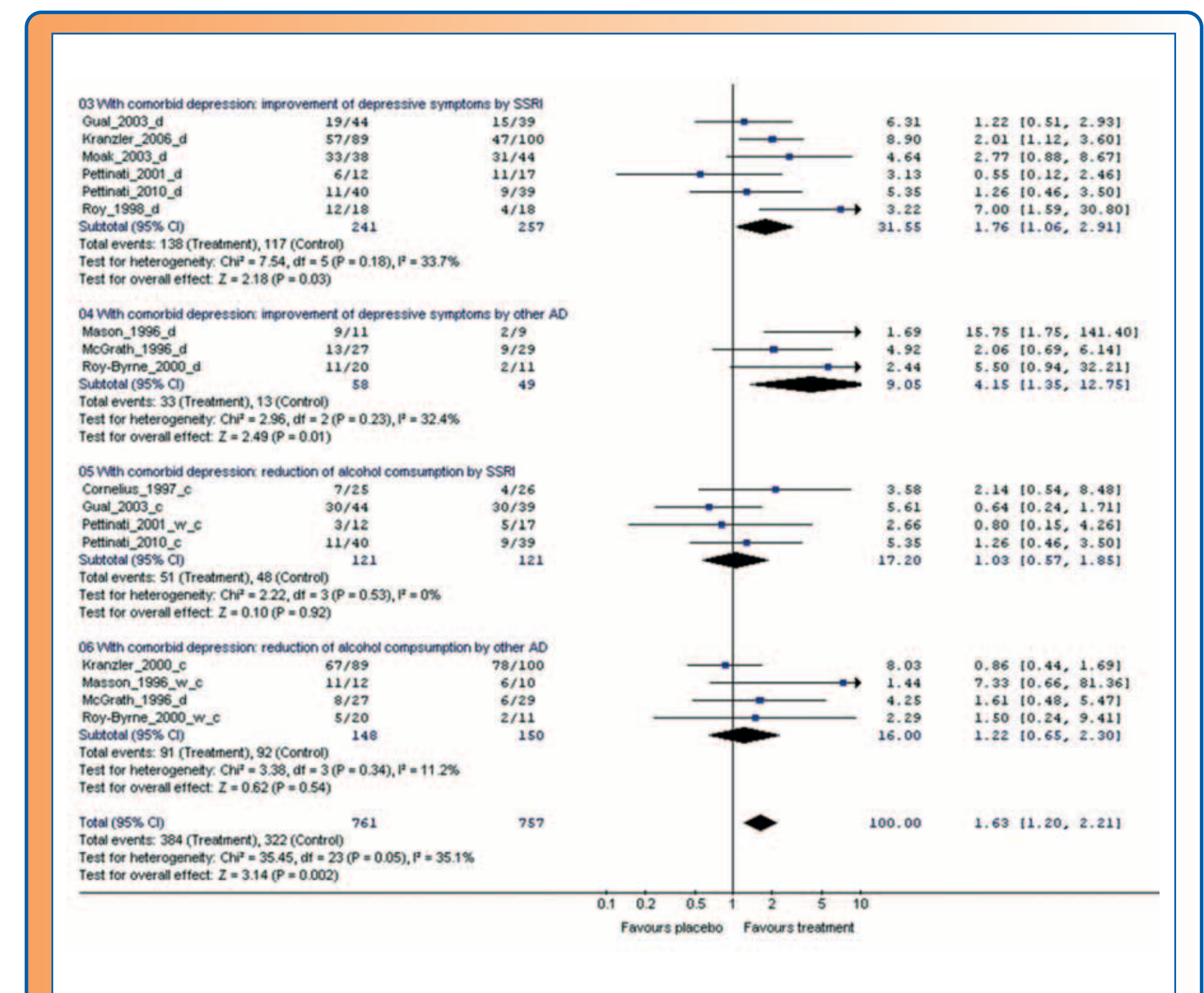


Figure 2. Effect of antidepressant medication in alcohol dependence and depression in patients with comorbid depression.

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