Q Can CBT effectively treat adult insomnia disorder?

EVIDENCE-BASED ANSWER

Y ES. Cognitive behavioral therapy (CBT) administered individually, in a group setting, or on the internet is effective for treating insomnia in adults compared with control (strength of recommendation [SOR]: A, meta-analyses).

CBT is comparable to pharmacotherapy for improving measures of sleep (SOR: A, comparative meta-analysis).

CBT produces sustainable improvements in subjective sleep quality for adults with comorbid insomnia (SOR: A, meta-analysis).

Evidence summary

Three meta-analyses that included only randomized controlled trials (RCTs) compared various CBT delivery methods with controls (wait-listed for treatment or general sleep hygiene education) to assess sleep outcomes for adults with insomnia.¹⁻³ TABLE 1⁻³ summarizes the results.

CBT is comparable to pharmacotherapy

A 2002 comparative meta-analysis of 21 RCTs with a total of 470 patients examined the effectiveness of CBT (stimulus control and/or sleep restriction) compared with pharmacotherapy (benzodiazepines or benzodiazepine agonists) for treating primary insomnia of longer than one month's duration in adults with no comorbid medical or psychiatric diagnoses.⁴ The CBT group received intervention over an average of 5 weeks, and the pharmacotherapy group received intervention over an average of 2 weeks.

CBT produced greater reductions in sleep onset latency than pharmacotherapy based on mean weighted effect size (1.05 vs 0.45 weighted effect size; 95% confidence interval, 0.17-1.04; P=.01). Although both CBT and pharmacotherapy improved sleep outcomes, no statistical differences were found in wake after sleep onset time, total sleep time, number of awakenings, or sleep quality ratings (TABLE 2)⁴.

CBT has significant benefit for comorbid insomnia

A 2015 meta-analysis of 23 studies enrolling a total of 1379 adults with a number of illnesses (chronic pain, alcohol dependence, breast cancer, psychiatric disorders, chronic obstructive pulmonary disease, fibromyalgia) and comorbid insomnia investigated the qualitative effectiveness of individual or group CBT therapy.⁵ Subjects received at least 4 face-to-face sessions and at least 2 components of CBT.

The primary outcome showed that sleep quality improved, as measured by a 6.36-point reduction in the Insomnia Severity Index (ISI; a 7-question scale on which 0=no insomnia and 28=severe insomnia) and a 3.3-point reduction in the Pittsburgh Sleep Quality Index (PSQI; a 7-category assessment tool on which 0=perfect quality and 21=poor quality). The effect size was large for both ISI and PSQI, as indicated by standard mean differences greater than 0.8 (1.22 and 0.88, respectively) and was sustained for as long as 18 months.
The American College of Physicians strongly recommends that all adult patients receive CBT as initial treatment for chronic insomnia disorder. It can be performed in multiple settings, including the primary care setting. Compared with hypnotics, CBT is unlikely to have any adverse effects.

**References**