FPIN's Clinical Inquiries

Is Trazodone Effective and Safe for Treating Insomnia?

Anita Albanese, MD; Brian Vukelic, MD; Dominik Ose, DrPH; Eliza Taylor, MPH, BS, CHES; and Katherine T. Fortenberry, PhD, University of Utah, Department of Family and Preventive Medicine, Salt Lake City, Utah

Clinical Question

Is trazodone effective and safe for treating insomnia?

Evidence-Based Answer

Trazodone should not be used to treat insomnia. Trazodone decreases the number of nightly awakenings and may slightly improve subjective sleep quality, but it does not significantly improve total sleep time, sleep efficiency (the ratio of time sleeping to time in bed), sleep latency, or waking time after sleep onset. (Strength of Recommendation [SOR]: B, multiple low-quality studies.) Trazodone causes more adverse effects than placebo. (SOR: B, low-quality randomized controlled trial [RCT].) It also has a higher fall risk than zolpidem or benzodiazepines. (SOR: B, retrospective cohort study.) Patients treated with trazodone, zolpidem, and benzodiazepines have higher fall rates than untreated patients.

Evidence Summary

A 2018 meta-analysis examining the use of trazodone for insomnia included seven RCTs with 429 adults (mean age = 46.1 years; range = 38.2 to 81 years; 58.2% female). Six trials took place in the outpatient setting, and one trial combined inpatients and outpatients.[1] Patients with insomnia were included regardless of whether it was primary or secondary insomnia. Primary outcomes included sleep efficiency and self-reported sleep quality. When trazodone was compared with placebo, there was no significant improvement in sleep efficiency (standardized mean difference [SMD] = 0.09; 95% CI, −0.19 to 0.38; P =.53) and small to no change in sleep quality (SMD = −0.41; 95% CI, −0.82 to −0.00; P =.05). Secondary outcomes included sleep latency, total sleep time, number of awakenings, and waking time after sleep onset. There was a significant decrease in the number of awakenings in patients receiving trazodone compared with placebo (SMD = −0.51; 95% CI, −0.97 to −0.05), with no significant differences in other secondary outcomes.

A 2018 Cochrane review pooled three RCTs (370 participants) examining trazodone.[2] Selection criteria included an age of 18 years or older and a primary diagnosis of insomnia; patients with other comorbidities were included. Results indicated moderate improvement in subjective outcomes measured by the Pittsburgh Sleep Quality Index compared with placebo (SMD = −0.34; 95% CI, −0.66 to −0.02). Two low-quality RCTs (169 participants) used polysomnography to assess sleep efficiency and found no difference (mean difference = 1.38%; 95% CI, −2.87 to 5.63). One low-quality RCT showed more adverse effects, including morning grogginess, dry mouth, and thirst, at two weeks with trazodone (65.4%) compared with placebo (75%; P = .003).

Clinical Inquiries provides answers to questions submitted by practicing family physicians to the Family Physicians Inquiries Network (FPIN). Members of the network select questions based on their relevance to family medicine. Answers are drawn from an approved set of evidence-based resources and undergo peer review. The strength of recommendations and the level of evidence for individual studies are rated using criteria developed by the Evidence-Based Medicine Working Group (https://www.cebm.net).

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A 2022 retrospective cohort study assessed fall risk, health care use, and cost among 313,086 adults in the United States treated with zolpidem, trazodone, or benzodiazepines for insomnia.[3] Data were collected from IBM MarketScan Commercial and Medicare supplemental databases for adults 18 years and older. Patients treated with these medications had a higher fall rate (3.34% vs. 1.33%) and fall risk (odds ratio = 2.36; 95% CI, 2.27 to 2.44) compared with age- and sex-matched non–sleep-disordered patients in the control group. Patients treated with trazodone (5.27 per 100 person-years) had a higher risk of falls compared with zolpidem extended-release (2.55 per 100 person-years), zolpidem immediate-relief (2.99 per 100 person-years), and benzodiazepines (3.85 per 100 person-years).

Recommendations From Others

The American Academy of Sleep Medicine clinical practice guidelines for the pharmacologic treatment of insomnia in adults recommend that clinicians do not use trazodone for sleep-onset or sleep-maintenance insomnia.[4]

Address correspondence to Katherine T. Fortenberry, PhD, at katie.fortenberry@hsc.utah.edu. Reprints are not available from the authors.

References

1. Yi XY, Ni SF, Ghadami MR, et al. Trazodone for the treatment of insomnia: a meta-analysis of randomized placebo-controlled trials. *Sleep Med.* 2018;45:25-32.
2. Everitt H, Baldwin DS, Stuart B, et al. Antidepressants for insomnia in adults. *Cochrane Database Syst Rev.* 2018;(5):CD010753.
3. Amari DT, Juday TR, Frech FH, et al. Fall risk, healthcare resource use, and costs among adult patients in the United States treated for insomnia with zolpidem, trazodone, or benzodiazepines: a retrospective cohort study. *Adv Ther.* 2022;39(3):1324-1340.
4. Sateia MJ, Buysse DJ, Krystal AD, et al. Clinical practice guideline for the pharmacologic treatment of chronic insomnia in adults: an American Academy of Sleep Medicine clinical practice guideline. *J Clin Sleep Med.* 2017;13(2):307-349. ■