

Practice Standards & Regulations: Stimulant Dosing for Hypersomnias

TL;DR:

American Academy of Sleep Medicine (formerly American Sleep Disorders Association), Standards of Practice Committee, 1994, 2000, 2007, 2021:

- Patients have a wide variation in response to stimulants ... therefore, full therapeutic response in adult patients with narcolepsy can usually be obtained with daily medication doses below the recommended maximal doses of: ... **dextroamphetamine sulfate, 100 mg**

"Understanding Unapproved Use of Approved Drugs "Off Label", **United States Federal Drug Administration**, 02/05/2018

The approved drug labeling for healthcare providers gives key information about the drug that includes:

- How to use the drug to treat those specific diseases and conditions.

From the **FDA perspective**, once the FDA approves a drug, healthcare providers generally may **prescribe the drug for an unapproved use when they judge that it is medically appropriate for their patient**.

Unapproved use of an approved drug is often called "off-label" use. This term can mean that the drug is:

- **Given in a different dose**, such as when a **drug is approved at a dose** of one tablet every day, **but a patient is told by their healthcare provider** to take two tablets every day.

References

Standards of Practice Committee of the American Sleep Disorders Association, Practice Parameters for the Use of Stimulants in the Treatment of Narcolepsy, Sleep, Volume 17, Issue 4, June 1994, Pages 348–351, <https://doi.org/10.1093/sleep/17.4.348> (Highlighted: <https://hyp.is/go?url=https%3A%2F%2Fdocdrop.org%2Fdownload%2Fannotation%2Fsleep-17-4-348-2acmm.pdf&group=world>)

This report provides the first clinical guidelines on the appropriate use of stimulants in the treatment of narcolepsy.

The American Sleep Disorders Association (ASDA) expects these guidelines to have an impact on professional behavior

Treatment aims are to improve daytime alertness with stimulant medication

2. Treatment objectives and indications

(a) The objective of treatment with stimulants should be to alleviate daytime sleepiness, thereby allowing the fullest possible return of normal function for patients at work, at school and at home [1.0].

(b) Stimulants are most effective at producing improvement in fatigue and sleepiness in boring and in-active situations;

4. Dosage

Patients have a wide variation in response to stimulants and in the incidence of side effects; therefore, full therapeutic response in adult patients with narcolepsy can usually be obtained with daily medication doses below the recommended maximal doses of: pemoline, 150 mg; methylphenidate hydrochloride, 100 mg; dextroamphetamine sulfate, 100 mg

6. Abuse

(a) Patients with narcolepsy are no more likely to become drug abusers or to use stimulant medications illicitly than any other group of patients treated with stimulants [5.5]

7. Side effects

Most patients with narcolepsy can be effectively treated with stimulants without developing significant side effects.

Little evidence suggests that stimulants in therapeutic doses cause a significant increase in blood pressure in normo- or hypertensive patients

11. Follow-up

(a) A patient stabilized on stimulant medication should be seen by a physician at least once per year, and preferably once every 6 months, to assess the development of medication side effects

Littner M, Johnson SF, McCall WV, Anderson WM, Davila D, Hartse SK, Kushida CA, Wise MS, Hirshkowitz M, Woodson BT; **Standards of Practice Committee. Practice parameters for the treatment of narcolepsy: an update for 2000.** Sleep. 2001 Jun 15;24(4):451-66. PMID: 11403530.
https://hyp.is/go?url=https%3A%2F%2Fasm.org%2Fresources%2Fpracticeparameters%2Fpp_narcolepsy_update.pdf&group=world

Because of the importance of narcolepsy treatment, the American Academy of Sleep Medicine (AASM) sponsored a review paper on the use of stimulants for treatment of narcolepsy in 1994.

Based on that review, the Standards of Practice Committee (SPC) of the AASM published practice parameters on narcolepsy therapy with stimulants.

In view of the new treatments, basic research advances, and the NGC protocol, the AASM decided to update the practice parameters for treatment of narcolepsy.

3. The following medications are effective treatments for narcolepsy. Comparative safety and efficacy of the stimulant medications are not defined. The rating of the recommendation is based on the grade of evidence for each. See Table 5 for dosages.

b. Amphetamine, methamphetamine, dextroamphetamine, and methylphenidate are effective for treatment of daytime sleepiness due to narcolepsy

Table 5.

MEDICATION: Amphetamine

Usual daily dose (maximum dose): 30 mg (100 mg)

Morgenthaler TI, Kapur VK, Brown T, Swick TJ, Alessi C, Aurora RN, Boehlecke B, Chesson AL Jr, Friedman L, Maganti R, Owens J, Pancer J, Zak R; Standards of Practice Committee of the American Academy of Sleep Medicine. **Practice parameters for the treatment of narcolepsy and other hypersomnias of central origin. Sleep. 2007** Dec;30(12):1705-11. doi: 10.1093/sleep/30.12.1705. Erratum in: Sleep. 2008 Feb 1;31(2):table of contents. PMID: 18246980; PMCID: PMC2276123.

c. Amphetamine, methamphetamine, dextroamphetamine, and methylphenidate are effective for treatment of daytime sleepiness due to narcolepsy [4.1.1.1] (Guideline).

This recommendation is unchanged from the previous recommendation. These medications have a long history of effective use in clinical practice

"AASM Updates Guidance on the Treatment of Narcolepsy & Other Hypersomnias", Sleep Review, Sep 5, 2021; <https://sleepreviewmag.com/sleep-disorders/hypersomnias/narcolepsy/aasm-updates-guidance-treatment-narcolepsy-hypersomnias/>

It's been more than a decade since the American Academy of Sleep Medicine (AASM) last issued guidelines for the treatment of central disorders of hypersomnolence

New AASM recommendations released in August 2021 on medications to treat these disorders

"The prior set of treatment recommendations was published in 2007," says Lynn Marie Trotti, MD, MSc, an associate professor of neurology at Emory University School of Medicine in Atlanta. Trotti

is on the board of directors at the AASM and co-authored the new hypersomnolence recommendations.

"The biggest implication of this change is that we were not able to make any recommendation for some interventions that have been widely used in clinical practice and were recommended in the 2007 guideline..." Trotti says.

Maski K, Trotti LM, Kotagal S, Robert Auger R, Rowley JA, Hashmi SD, Watson NF. **Treatment of central disorders of hypersomnolence: an American Academy of Sleep Medicine clinical practice guideline.** J Clin Sleep Med. 2021 Sep 1;17(9):1881-1893. doi: 10.5664/jcsm.9328. PMID: 34743789; PMCID: PMC8636351.

Recommendation 6: We suggest that clinicians use dextroamphetamine for the treatment of narcolepsy in adults....these studies demonstrated clinically significant improvements in excessive daytime sleepiness

Different choices may be appropriate for different patients. The clinician must help each patient determine if the suggested course of action is clinically appropriate and consistent with his or her values and preferences. The ultimate judgment regarding the suitability of any specific recommendation must be made by the clinician and the patient

"Understanding Unapproved Use of Approved Drugs "Off Label", **United States Federal Drug Administration**, 02/05/2018; <https://www.fda.gov/patients/learn-about-expanded-access-and-other-treatment-options/understanding-unapproved-use-approved-drugs-label>

The approved drug labeling for healthcare providers gives key information about the drug that includes:

- How to use the drug to treat those specific diseases and conditions.

From the FDA perspective, once the FDA approves a drug, healthcare providers generally may prescribe the drug for an unapproved use when they judge that it is medically appropriate for their patient.

Unapproved use of an approved drug is often called "off-label" use. This term can mean that the drug is:

- Given in a different dose, such as when a drug is approved at a dose of one tablet every day, but a patient is told by their healthcare provider to take two tablets every day.