SLEEP-WAKE DISORDERS

Hypersomnolence Disorder

DSM-5-TR 780.54 | ICD-10-CM G47.10

Excessive sleepiness despite at least 7 hours of sleep, with unrefreshing long sleep, severe sleep inertia, and irrepressible daytime naps.

PREVALENCE	TYPICAL ONSET	SEX RATIO	COURSE
~1% of US adults	Late teens to early 20s	Roughly equal	Chronic and stable once set

CLINICAL PICTURE

- Patients sleep 9 or more hours yet wake unrefreshed, describing sleep drunkenness with confusion and irritability that can last an hour or more.
- Naps are long, typically over an hour, and non-restorative, in sharp contrast to the brief refreshing naps that characterize narcolepsy.
- Severe sleep inertia is the signature: stacked alarms across the room, family members required to wake the patient, and automatic behavior.
- Sleepiness produces microsleeps, memory lapses, and drowsy driving, and academic or occupational failure usually precedes the referral.
- Autonomic complaints are common, including orthostatic lightheadedness, cold hands and feet, headaches, and Raynaud-type phenomena.
- Cataplexy, sleep paralysis, and hypnagogic hallucinations are absent, which is the clinical line separating this from narcolepsy type 1.

DIAGNOSTIC CRITERIA AT A GLANCE

- Self-reported excessive sleepiness despite a main sleep period lasting at least 7 hours, accompanied by at least one of three specific features.
- Those features are recurrent lapses into sleep within the same day, a nonrestorative main sleep period exceeding 9 hours, or difficulty being fully awake after abrupt awakening.
- Symptoms occur at least three times per week for at least 3 months with significant distress or impairment in cognitive, social, or occupational domains.
- Sleepiness cannot be better explained by another sleep disorder, by a substance, or by a coexisting mental or medical condition.
- Specify acute under 1 month, subacute 1 to 3 months, or persistent beyond 3 months, and grade severity by the number of impaired days per week.

NEUROBIOLOGY & PHYSIOLOGY

- Unlike narcolepsy type 1, cerebrospinal fluid hypocretin-1 is normal, so orexin cell loss does not account for the sleepiness in this population.
- A subset shows a cerebrospinal fluid factor that potentiates GABA-A signaling, the rationale for trials of **flumazenil** and **clarithromycin**.
- Long sleep time variants may reflect a lengthened intrinsic circadian period together with abnormally slow dissipation of homeostatic sleep pressure.
- Polysomnography shows high sleep efficiency with short latency, and the MSLT typically yields mean latency under 8 minutes with fewer than two SOREMPs.
- Familial clustering is reported in roughly a third of cases, although no single causal gene has been established for the phenotype.
- Untreated sleepiness carries a several-fold increase in motor vehicle crash risk and is associated with obesity and depressive disorders.

PSYCHOLOGICAL MECHANISMS

- Chronic unexplained sleepiness is repeatedly attributed to laziness or depression, producing shame, identity damage, and diagnostic delay of years.
- Patients build elaborate compensatory routines with stacked alarms, caffeine loading, and rigid scheduling that partially mask true severity.
- Behavioral activation and activity pacing help separate anergia driven by depression from genuine sleepiness driven by the sleep disorder.
- Illness acceptance work and disability accommodation planning reduce the catastrophic thinking that follows repeated occupational failure.
- Self-report diaries are unreliable during severe sleep inertia, so collateral report from a bed partner or parent is essential to assessment.

DIFFERENTIAL & COMORBIDITY

- Narcolepsy type 1 features cataplexy and low hypocretin-1, while type 2 requires two or more SOREMPs with mean MSLT latency under 8 minutes.
- Exclude obstructive sleep apnea, insufficient sleep syndrome, delayed sleep phase, and shift work before diagnosing a central hypersomnolence.
- Major depression with atypical features, bipolar depression, and seasonal patterns commonly present with hypersomnia and must be assessed directly.
- Medications are a frequent cause: sedating antidepressants, antipsychotics, antihistamines, gabapentinoids, opioids, and cannabis products.
- Screen for hypothyroidism, anemia, traumatic brain injury, Kleine-Levin syndrome, and myotonic dystrophy in atypical or abrupt presentations.

Treatment EVIDENCE-BASED MANAGEMENT

PHARMACOLOGIC

- **Modafinil 100-400 mg/day** or armodafinil 150-250 mg/day is first-line; counsel on reduced hormonal contraceptive efficacy and rare severe rash.
- **Methylphenidate** and amphetamine derivatives are second-line when wake-promoting agents fail; monitor blood pressure, weight, and misuse risk.
- **Solriamfetol 75-150 mg/day** and **pitolisant** are approved for narcolepsy and sleep apnea sleepiness and are used off-label here.
- **Lower-sodium oxybate** is FDA-approved for idiopathic hypersomnia in adults, dosed nightly under a REMS with monitoring for respiratory depression.
- **Clarithromycin** and **flumazenil** target the GABA-A potentiating factor and are reserved for refractory cases at specialist sleep centers.

PSYCHOTHERAPY

- **CBT** adapted for hypersomnia targets morning routines, activity scheduling, and the guilt and self-blame accumulated over years of misattribution.
- Behavioral sleep medicine sets a fixed wake time and limits time in bed, since extended sleep opportunity worsens rather than relieves inertia.
- Psychoeducation with family and employers reframes the problem as neurological rather than motivational and helps secure accommodations.
- Treat comorbid depression concurrently, favoring activating agents such as **bupropion** over sedating antidepressants in this population.
- Peer support and illness acceptance work reduce the isolation patients report while living with a poorly recognized central hypersomnia.

ADJUNCT & SUPPORTIVE

- Track response with the **Epworth Sleepiness Scale**, where scores above 10 indicate pathologic sleepiness and a 3-point fall is meaningful.
- Confirm the diagnosis with 1 to 2 weeks of actigraphy, then overnight polysomnography followed immediately by a five-nap **MSLT**.
- Counsel explicitly about driving, document the conversation, and follow state requirements for reporting impaired drivers where they apply.
- Scheduled naps help far less than in narcolepsy because naps here are long and unrefreshing, so prescribe them selectively if at all.
- Arrange academic and workplace accommodations under the ADA: late start times, flexible scheduling, and protected breaks for rest.

CLINICAL PEARLS

- Long naps that do not refresh point away from narcolepsy toward hypersomnolence.
- Sleep drunkenness is the tell: ask who wakes the patient and how long it takes.
- Rule out apnea and insufficient sleep before calling sleepiness central.

References

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). https://doi.org/10.1176/appi.books.9780890425787

Dauvilliers, Y., Arnulf, I., Foldvary-Schaefer, N., Morse, A. M., Sonka, K., Thorpy, M. J., Plazzi, G., Chandler, P., Parvataneni, R., Chen, D., Skowronski, R., Black, J., Bogan, R. K., & Rogers, R. (2022). Safety and efficacy of lower-sodium oxybate in adults with idiopathic hypersomnia: A phase 3, placebo-controlled, double-blind, randomised withdrawal study. *The Lancet Neurology*, *21*(1), 53-65. https://doi.org/10.1016/S1474-4422(21)00368-9

Dhillon, K., & Sankari, A. (2023). *Idiopathic hypersomnia*. In *StatPearls*. StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK585065/

Maski, K., Trotti, L. M., Kotagal, S., Auger, R. R., Rowley, J. A., Hashmi, S. D., & Watson, N. F. (2021). Treatment of central disorders of hypersomnolence: An American Academy of Sleep Medicine clinical practice guideline. *Journal of Clinical Sleep Medicine*, *17*(9), 1881-1893. https://doi.org/10.5664/jcsm.9328

Sadock, B. J., Sadock, V. A., & Ruiz, P. (2021). *Kaplan & Sadock's synopsis of psychiatry* (12th ed.). Wolters Kluwer.

Stahl, S. M. (2021). *Stahl's essential psychopharmacology* (5th ed.). Cambridge University Press.

Trotti, L. M., & Arnulf, I. (2021). Idiopathic hypersomnia and other hypersomnia syndromes. *Neurotherapeutics*, *18*(1), 20-31. https://doi.org/10.1007/s13311-020-00919-1

NOTE

References are formatted in APA 7th edition style with hanging indents. Diagnostic terminology, criteria structure, and coding follow the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., text rev.; APA, 2022); criteria are paraphrased for instructional use and are not reproduced verbatim. Verify all citations against the original sources before use in academic work, and confirm medication dosing against current prescribing information.