Treatment of Chronic Insomnia

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DISCLOSURES

• None
OVERVIEW

1. Insomnia in primary care
2. Treatment position statements
3. Treating insomnia in the BSM clinic
4. Treating insomnia primary care settings
5. What you should do/no do in primary care
6. Who to treat in primary care/who to refer
INSOMNIA IN PRIMARY CARE

Responders (%)

Dozes off during daily activities: 37%
Snores loudly: 33%
Breathing lapses during sleep: 14%
RLS symptoms: 28%
Insomnia symptoms: 34%

N=1934

DIAGNOSING INSOMNIA: WHAT TO ASK

• Do you have any concerns about your sleep?
• Do you have trouble falling asleep? or staying asleep?
• Do you need to take something in order to sleep? Or to stay awake during the day?
• How many hours are you sleeping on the typical night?
• Are you sleepy during the day?
• Do you snore or have pauses in your breathing at night?
CHRONIC INSOMNIA DISORDER

- Difficulty initiating, maintaining sleep, or waking up too early, or
- Resisting going to bed on schedule, or
- Difficulty sleeping w/o parent/caregiver

- Adequate opportunity for sleep
- At least 1 daytime consequence
- At least 3 nights per week
- At least 3 months (Acute insomnia: < 3 months)
HOW INSOMNIA DEVELOPS

Spielman & Glovinsky, in Hauri, 1991
PERPETUATING FACTORS IN INSOMNIA

• too much time in bed
• “catch sleep if it occurs”
• sleep later when possible
• nap after poor night’s sleep

• caffeine & stimulants for sleepiness
• alcohol self-medicating for sleep
• random/habitual use of hypnotics

• expectations of poor sleep
• unreasonable concerns over next-day consequences

Behavioral
Pharmacologic
Cognitive

Spielman, Clinical Psychology Review, 1986
Wyatt & Crisostomo, in Sleep Medicine, 2008
HOW IS INSOMNIA DIAGNOSED

NO!

• A sleep study
• A sleep medicine physician evaluation

YES!

• Clinical interview
• Other options
  – Standardized questionnaires
  – Sleep logs
  – Activity monitoring (actigraphy)
Treatment options
Conclusion: Eszopiclone, zolpidem, and suvorexant may improve short-term global and sleep outcomes for adults with insomnia disorder, but the comparative effectiveness and long term efficacy of pharmacotherapies for insomnia are not known. Pharmacotherapies for insomnia may cause cognitive and behavioral changes and may be associated with infrequent but serious harms.

Wilt et al., Ann Int Med 2016
Methods. We conducted a new user cohort study of 409,171 adults in an integrated health care system. Health plan data were linked to driver license and collision records. Participants were aged 21 years or older, licensed to drive in Washington State, had at least 1 year of continuous enrollment between 2003 and 2008, and were followed until death, disenrollment, or study end. We used proportional hazards regression to estimate the risk of crash associated with 3 sedatives.

Results. We found 5.8% of patients received new sedative prescriptions, with 11,197 person-years of exposure. New users of sedatives were associated with an increased risk of crash relative to nonuse: temazepam hazard ratio (HR) = 1.27 (95% confidence interval [CI] = 0.85, 1.91), trazodone HR = 1.91 (95% CI = 1.62, 2.25), and zolpidem HR = 2.20 (95% CI = 1.64, 2.95). These risk estimates are equivalent to blood alcohol concentration levels between 0.06% and 0.11%.

PRESCRIBING SHORT-TERM HYPNOTICS? (MORIN 2009)

• No significant difference in response to CBT or outcome with short term hypnotic prescription (6 weeks).
• Overall, 60% responded and 42% remitted
• Zolpidem as needed after 6 weeks did not confer a benefit.
Recommendation 1: ACP recommends that all adult patients receive cognitive behavioral therapy for insomnia (CBT-I) as the initial treatment for chronic insomnia disorder. (Grade: strong recommendation, moderate-quality evidence)

Recommendation 2: ACP recommends that clinicians use a shared decision-making approach, including a discussion of the benefits, harms, and costs of short-term use of medications, to decide whether to add pharmacological therapy in adults with chronic insomnia disorder in whom cognitive behavioral therapy for insomnia (CBT-I) alone was unsuccessful. (Grade: weak recommendation, low-quality evidence)

For author affiliations, see end of text.
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3. BEHAVIORAL SLEEP MEDICINE AT UUSWC: WHAT WE DO

• CBT for insomnia
• PAP non-compliance
• Nightmare disorder
• Circadian rhythm disorders, shift work
• Non-pharmacologic treatment for parasomnia
• Coping with hypersomnia
4. COMPONENTS OF CBT-I

- Brief (4-6 sessions), time limited (weekly, bi-weekly)
- Specialized (not all therapists are trained to do it)
- Multicomponent
  - Sleep Restriction/ Sleep Compression
  - Stimulus Control
  - Sleep Hygiene Education
  - Cognitive Restructuring
  - Relaxation Training
Circadian and Homeostatic Regulation of Sleep

Melatonin

Adapted from Edgar et al. J Neurosci. 1993
ISSUES WE DISCUSS BEFORE STARTING ......

• Is this the right treatment?
  – What are the alternatives available?
  – Is additional treatment needed for physical or psychiatric disorders?
  – Is the patient able/willing to put in the time?
  – Sleep medications?
OTHER REASONS FOR DIFFICULTY SLEEPING

• Circadian disorders
• Restless legs syndrome
• Sleep apnea
CIRCADIAN RHYTHM SLEEP DISORDERS

• Extrinsic
  – Jet lag
  – Shift work
• Intrinsic
  – Advanced sleep-wake phase disorder
  – Delayed sleep-wake phase disorder
  – Irregular sleep-wake phase disorder
  – Non-24 hr sleep rhythm disorder
CIRCADIAN RHYTHM SLEEP WAKE DISORDERS

15:00

2:00

14:00

- Normal Sleep
- Delayed Sleep Wake
- Advanced Non-24 Hour Sleep Wake Disorder
- Irregular Sleep Wake Type
SLEEP RESTRICTION (SPIELMAN)

- Increases drive to sleep by restricting time in bed
- Set the “sleep window” to the hours actually asleep on the sleep diary (minimum of 5 hrs)
- Adjust the window based on % of the sleep window they are sleeping
  - Increase or decrease based on % of time sleeping
  - Adjust by 15 or 20 min
  - Keep stable if SE = 80-90%
Baseline sleep diary
Total sleep time= 3 hrs
SLEEP RESTRICTION WEEK 1. LIMITED TO 5 HOURS
TIME IN BED
SLEEP RESTRICTION WEEKS 2-3
GRADUALLY MOVED BEDTIME EARLIER
SLEEP RESTRICTION 4-5
REACHED HER GOAL SLEEP TIME
STIMULUS CONTROL (BOOTZIN)

- Don’t get into bed unless sleepy
- Use bed only for sleep and sex
- Get out of bed after 15-20 min awake
- Avoid daytime napping
- Get up at the same time each morning

* Note- the effects should be judged over a week or more
IMPROVING SLEEP HABITS (SLEEP HYGIENE)

• Reduce obviously problematic behaviors (caffeine, alcohol)
• Some they may not think of (e.g. reducing fluids in the evening, 2 pm coffee)
• Needs a plan and follow-up
RELAXATION TRAINING (NOT A STAND ALONE SOLUTION)

• Breathing
• Progressive muscle relaxation
• Free apps- Insight timer
<table>
<thead>
<tr>
<th>Ways in Which People Have Wronged Me</th>
<th>Strange Noises</th>
<th>Diseases I Probably Have</th>
<th>Money Troubles</th>
<th>Why Did I Say/Do That?</th>
<th>Ideas for a Screenplay</th>
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COGNITIVE RESTRUCTURING

• Identify, evaluate, and replace dysfunctional beliefs
• Targets
  – Unrealistic sleep expectations
  – Misconceptions about insomnia
  – Catastrophic thinking (losing job, health)
  – Helplessness/hopelessness
  – Performance anxiety
CBT-I is highly effective in many populations

- Effects are comparable to hypnotic medications and longer lasting, preferred by patients
- Moderate to large effect size
  - Sleep latency (Cohen’s $d = -0.52$)
  - Sleep quality (Cohen’s $d = 0.89$)
  - Wakefulness after sleep onset (Cohen’s $d = -0.57$)
  - Sleep efficiency (Cohen’s $d = 1.00$)
  - Total sleep time (adults Cohen’s $d = 0.42$).

Irwin, Cole & Nicassio et al., 2006
CBT-I EFFECT SIZE: COMORBID INSOMNIA
36 VS 17% REMISSION

<table>
<thead>
<tr>
<th>Source</th>
<th>OR</th>
<th>95% CI</th>
<th>z Value</th>
<th>P Value</th>
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<td>Alcohol dependence: Arnedt et al, 2011</td>
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<td>Depression: Wagley et al, 2012</td>
<td>3.17</td>
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Favors Control/ Comparison
Favors CBT-I

OR (95% CI)
4. PRIMARY CARE “FRIENDLY” TREATMENT: BRIEF BEHAVIORAL THERAPY FOR INSOMNIA (BBTI)

1. Spend only the number of hours in bed that you are sleeping
2. Don’t get into bed unless sleepy
3. Don’t stay awake in the night
4. Get up at the same time each morning

Troxel et al., 2009
HOW YOU CAN START BEHAVIORAL INSOMNIA INTERVENTIONS

• Optimize chronic medical and psychiatric dx
• Assess patient preferences
• Assess for comorbid sleep disorders
• **Use a sleep diary**
• Assess response/adherence to BSM interventions within 1-2 weeks
THINGS THAT YOU SHOULD NOT DO

X Refer patients with insomnia for a sleep study (if not otherwise indicated, such as sleep apnea)
X Provide only a handout
X Provide hypnotics without discussing patient preferences, side effects and planned duration of therapy
WHO SHOULD BE DIRECTLY REFERRED TO BSM?

• No clear answer but some suggestions
  – Insomnia complaint >1 month
  – Hypnotic medication not working well
  – Hypnotics working well but open to trying to taper
  – Someone who is at least willing to explore the option of behavioral treatment
SUMMARY

• You **CAN** diagnose insomnia use behavioral sleep medicine techniques in your clinic
• You **CAN** directly refer to behavioral sleep medicine
• You **CAN** authorize to taper
THANK YOU

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