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Psychiatry and Addictions Case Conference

UW Medicine | Psychiatry and Behavioral Sciences

06/27/2019

WELCOME!

Today's Topic:

Sleep treatment update:

What are some key strategies to help my patients with sleep, and should I ever consider a sleep aid?

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PANELISTS:

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WHAT ARE SOME KEY STRATEGIES TO HELP MY PATIENTS WITH SLEEP, AND SHOULD I EVER CONSIDER A SLEEP AID?

Joe Baldwin MD

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UW Medicine UW SCHOOL OF MEDICINE

Integrated Care Training Program UW Psychiatry & Behavioral Sciences

project ECHO

General Disclosures

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GENERAL DISCLOSURES

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Speaker Disclosures

- I have no disclosures to report

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SPEAKER DISCLOSURES

✓ No conflicts of interest

PLANNER DISCLOSURES

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Objectives

1. Become familiar with different causes of insomnia
2. Be able to identify what interventions would be helpful for your patient's sleep disturbance
3. Become familiar with current pharmacologic approaches for insomnia

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INSOMNIA DISORDER - DEFINITION

- A predominant complaint of dissatisfaction with sleep quantity or quality, associated with one (or more) of the following symptoms:
  - Difficulty initiating sleep.
  - Difficulty maintaining sleep
  - Early-morning awakening with inability to return to sleep
- The sleep disturbance causes clinically significant distress or impairment in social, occupational, educational, academic, behavioral, or other important areas of functioning
- The sleep difficulty occurs at least **3 nights per week**
- The sleep difficulty is present for at least **3 months** (Chronic)

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INSOMNIA DISORDER - DEFINITION

- The insomnia is not attributable to the physiological effects of a substance
- The insomnia is not attributable to the physiological effects of a substance
- Coexisting mental disorders and medical conditions do not adequately explain the predominant complaint of insomnia

CASE - I CAN'T SLEEP!!

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PREVALENCE

- Between one-third and two-thirds of the general population have endorsed insomnia symptoms of any severity
- Chronic insomnia with interference in daytime functioning is estimated to have a prevalence of 10-15%.

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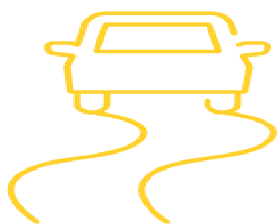
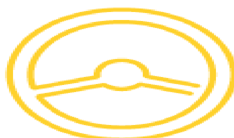
SLEEP DEPRIVATION
EFFECTS

Lack of sleep is a health issue that deserves your attention and your doctor's help. Not getting enough sleep—due to insomnia or a sleep disorder such as obstructive sleep apnea, or simply because you're keeping late hours—can affect your mood, memory and health in far-reaching and surprising ways, says Johns Hopkins sleep researcher Patrick Finan, Ph.D. Sleep deprivation can also affect your judgment so that you don't notice its effects.

SAFETY



6,000 FATAL CAR CRASHES CAUSED BY DROWSY DRIVING EACH YEAR



1 IN 25 ADULTS WHO'VE FALLEN ASLEEP AT THE WHEEL IN THE PAST MONTH

WEIGHT

MORE CRAVINGS FOR SWEET, SALTY & STARCHY FOOD

↑ Higher levels of the **hunger hormone** ghrelin

↓ Lower levels of the **appetite-control hormone** leptin

50% HIGHER RISK FOR OBESITY IF YOU GET LESS THAN 5 HOURS OF SLEEP NIGHTLY

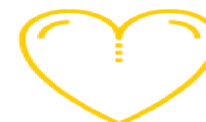
HEALTH

LESS ACTIVE IMMUNITY PROTECTORS CALLED NATURAL KILLER CELLS

36% INCREASE IN RISK FOR COLORECTAL CANCER

NEARLY **3X** RISK FOR TYPE 2 DIABETES

INCREASED RISK OF HIGH BLOOD PRESSURE



48% INCREASE IN DEVELOPING HEART DISEASE

3X MORE LIKELY TO CATCH A COLD

BRAIN EFFECTS

33% INCREASE IN DEMENTIA RISK

GREATER RISK FOR:

- Depression
- Irritability
- Anxiety
- Forgetfulness
- Fuzzy thinking

3-5 YEARS HOW MUCH SLEEP DEPRIVATION CAN AGE YOUR BRAIN

CAUSES OF SLEEP DISTURBANCE

- Medical Conditions (TBI, BPH, COPD, MSK Pain, CHF)
- Psychiatric Conditions (MDD, PTSD, Schizophrenia, Anxiety)
- Sleep Disorders (OSA, Restless Leg, Sleep Phase Disorders)
- Medications (Steroids, Bronchodilators, Stimulants)
- Substances (Alcohol, Caffeine, Cocaine, Methamphetamine)

HISTORY

- When do you get out of bed?
  - Does this change depending on the day?
- What activities do you do during the day?
- Do you return to your bed during the day?
- Do you nap?
- Do you drink Caffeine? When?
- What do you do before bed?
- What have you tried to take for sleep?
- When do you get into bed? When do you fall asleep?
- What do you do in bed?
- Are there environmental factors affecting your sleep?
- Do you wake up at night? If so how long does it take to go back to sleep?
- How well rested do you feel in the morning?

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OBSTRUCTIVE SLEEP APNEA SCREENING

- STOP BANG - 8 item questionnaire
  - S - Do you snore?
  - T - Are you tired during the day?
  - O - Observed choking or apnea at night?
  - P - Have you been treated for high blood pressure?
  - B - BMI > 35
  - A - Age > 50
  - N - Neck > 17i for men, 16i for women
  - G - Male Gender
- Scores < 2 have a low risk for sleep apnea
- Scores ≥ 5 have a high risk for sleep apnea (specificity of 80%)

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NOT ENOUGH HISTORY IS A COMMON PITFALL!

- Insomnia was previously categorized as primary or secondary
- It is now recognized as a disorder on its own
- Treatments should be targeted at both the cause of the insomnia and also the insomnia itself
- Hypnotics (such as Zolpidem) are contraindicated in OSA

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CBT-I: THE FIRST-LINE RECOMMENDATION FOR TREATMENT OF INSOMNIA

- Targets cognitions, behaviors, and emotions surrounding insomnia
- Has significant data showing efficacy for chronic insomnia including sleep quality, sleep efficiency, and sleep onset latency
- Results are sustained > 6 months
- Short course - often between 6-10 sessions
- Minimal risks compared to medications, although the patient has to be motivated for behavioral change

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COMPONENTS OF CBT-I

- Sleep Diary
- Stimulus Control
- Sleep Restriction
- Relaxation
- Sleep Hygiene
- Cognitive Therapy

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SLEEP HYGIENE

- Provides education surrounding good habits for sleep, to avoid naps, limit caffeine intake, and activities during the day
- Weak effect size on insomnia when provided alone

Sleep Medicine Associates Sleep / Wake Diary

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
NAME:	DATE:	DATE:	DATE:	DATE:	DATE:	DATE:	DATE:
Answer the following in the morning							
What time did you get into bed last night?	:	:	:	:	:	:	:
What time did you turn everything off and try to fall asleep?							
How long did it take you to fall asleep after that?	:	:	:	:	:	:	:
What did you do between getting into bed and falling asleep?							
Did you wake up during the night? How often? How long were you awake total?							
What time was your final awakening this morning?	:	:	:	:	:	:	:
What time did you get out of bed?	:	:	:	:	:	:	:
Did anything unusual happen yesterday that might have affected your sleep? (Illness, disturbances, emotional stress, etc)							
What is the total amount of time you slept last night in hours and minutes? (Best estimate)							
Did you take any medication that might have affected your sleep? What? When?							
Answer the following in the evening							
Did you nap today? How many times? When? How long?							
Did you consume any medicine that you do not take on a daily basis? What? How much? When?							
Did you have any caffeinated or alcoholic beverages today? What? How much? When?							
Please rate your average sleepiness today on a scale of 1-10, 1=wide awake, 10=very sleepy.							

List any medications taken regularly—both prescription and over-the-counter, how much, and how often you are taking them:

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CBT-I - CONTINUED

- **Stimulus Control**
  - Bed used only for sleep and sex
  - Leave bed if unable to fall asleep
  - Get out of bed at the same time daily
- **Sleep Restriction**
  - Set amount of time in bed
  - Time in bed increases gradually as efficiency increases
  - Contraindicated in bipolar disorder; caution with seizures
- **Relaxation**
  - Diaphragmatic Breathing, Guided Imagery, Muscle Relaxation
- **Cognitive Therapy**
  - Identify and challenge cognitive distortions

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CASE - HISTORY

- The man calmed down and was able to answer your questions. He is 45 with no significant medical or psychiatric history. His STOP-BANG score is 1. He has only gotten 2-3 hours of sleep a night since his father passed away last week. He tried alcohol to help with sleep but found that he would just feel worse so stopped. He also tried Benadryl, but it made him feel groggy in the morning.

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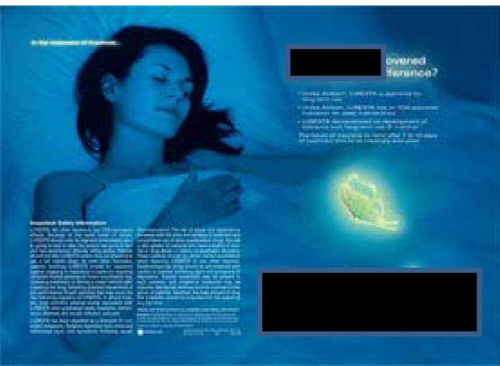
BENZODIAZEPINES AND “Z” DRUGS

- Benzodiazepines (sleep onset and maintenance)
    - Flurazepam, Temazepam, Triazolam, Estazolam, Quazepam
- Non-benzodiazepines
    - Zolpidem, Zaleplon (sleep onset only)
    - Eszopiclone (sleep onset and maintenance



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ADVERSE EFFECTS

- Benzodiazepines
  - Increased risk of falls / hip fractures
  - Cognitive and memory effects
  - Abuse and dependence; CNS depressant
- Non-Benzodiazepine Hypnotics
  - Impaired cognitive and motor function
  - Amnesia
  - Daytime automatisms
- Avoid both in elderly, OSA, patient's taking other CNS depressants, TBI

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FDA WARNINGS

- 2013 - Recommended dose for Zolpidem for Women reduced from 10mg to 5mg (12.5 to 6.25 for sustained released)
- 2014 - Eszopiclone 3mg dose causes impairment in driving skills - reduced recommended dose to 1mg
- 04/2019 - Box Warning for Eszopiclone, Zolpidem, and Zaleplon surrounding complex sleep behaviors. Contraindicated if patient has had prior complex sleep behavior

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CASE SERIES ON ZOLPIDEM

- Article has eight clinical patients and 6 legal defendants in relation to zolpidem ingestion
- Multiple instances of sleep driving (even on a freeway), amnestic episodes, dysarthria, and confusion

J Clin Sleep Med. 2011 Dec 15;7(6):632-8. doi: 10.5664/jcsm.1468.

SETTING EXPECTATIONS

- Prior to prescribing a short-term sleep aid, set expectations with the patient and set check in periods (2-4 weeks)
- Discuss potential adverse events, especially complex sleep behaviors
- Discuss that these medications are for symptom management, and do not treat the underlying cause of insomnia
- Choose an agent that targets symptoms (sleep initiation vs maintenance as well)
- There is no data to support long-term sleep aids, and the American Academy of Sleep Medicine recommends against this

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ANTIHISTAMINES

- Patients will often turn to over the counter remedies, such as Benadryl, Unisom, etc
- Some preparations (Nyquil) have APAP
- Limited evidence for Hydroxyzine
- Commonly have side-effects, especially in the elderly
  - Urinary retention
  - Morning Sedation
  - Habituation
  - Confusion

OTHER SLEEP AIDS

- Doxepin (Silenor)
  - Used for sleep in low doses (3-6mg)
  - Primarily H1 Antagonist; Cardiac toxicity in overdose
- Suvorexant (Belsomra)
  - Orexin Antagonist; Schedule IV Drug
  - Don't use in Narcolepsy
  - Does not have strong evidence
- Ramelton
  - Melatonin agonist with benign side-effect profile
  - Do not use with hepatic impairment
- Trazodone
  - Can cause hypotension, dizziness, priapism in men
  - Efficacy not well established

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SPECIAL POPULATIONS

- In patients with comorbid depression, consider sedating antidepressants, such as mirtazapine
- In patients with co-morbid bipolar depression, consider quetiapine
- In patients with comorbid PTSD, consider prazosin if the patient has trauma related nightmares
- Do not use antipsychotics on their own for just insomnia

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Take Home Points

- A good history will uncover the cause of insomnia and help drive targeted interventions
- CBT-I is considered the gold standard for chronic insomnia
- Sleep aids should not be prescribed for chronic insomnia, and have risks associated with them
- There are patients that would benefit from a short-course of sleep aids for symptom management, and expectations and length of treatment should be set at the start

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REFERENCES

1. Diagnostic and Statistical Manual of Mental Disorders: **Dsm**-5. Arlington, VA: American Psychiatric Association, 2013. Print.
2. Ford ES, Wheaton AG, Cunningham TJ, et al. Trends in outpatient visits for insomnia, sleep apnea, and prescriptions for sleep medications among US adults: findings from the National Ambulatory Medical Care survey 1999-2010. Sleep 2014; 37:1283.
3. https://www.hopkinsmedicine.org/health/wellness-and-prevention/the-effects-of-sleep-deprivation
4. Edinger JD, Wohlgemuth WK, Radtke RA, Marsh GR, Quillian RE. Cognitive behavioral therapy for treatment of chronic primary insomnia: a randomized controlled trial. JAMA. 2001 Apr 11;285(14):1856-64.
5. https://www.cci.health.wa.gov.au/~/media/cci/mental%20health%20professionals/sleep/sleep%20-%20information%20sheets/sleep%20information%20sheet%20-%2004%20-%20sleep%20hygiene.pdf
6. Brasure et al, 2016, Traer et al 2015, Morin et al, 1994, Edinger 2001, Mitchell et al, 2012
7. Lie JD, Tu KN, Shen DD. Pharmacological treatment of insomnia. P&T. 2017;40:759–71.
8. J Clin Sleep Med. 2011 Dec 15;7(6):632-8. doi: 10.5664/jcsm.1468.
9. Sateia MJ, Buysse DJ, Krystal AD, Neubauer DN, Heald JL. 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.

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