Managing Sleep Disorders in Primary Care

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Objectives

• 1) Identify stages and behaviors for normal sleep
• 2) Recognize sleep disorders across lifespan
• 3) Become aware of practice guidelines for treating OSA, RLS, RBD, parasomnias

Disclosures

• Speakers bureau for Purdue Pharma
• Has 2 F’s on her college transcript
• Weighs 6 pounds more now than she weighed when she delivered her 2nd child.
• Dreams of being famous
What is a Sleep Disorder?

To qualify for the diagnosis of sleep disorder, the condition must be:

- **persistent problem**
- **cause the patient significant emotional distress**
- **interfere with his or her social or occupational functioning**

Co-morbid Possibilities
Five major categories of Sleep Disorders

1. Disorders of initiating and maintaining sleep
2. Sleep-related breathing disorders
3. Disorders of excessive somnolence
4. Disorders of sleep-wake cycle
5. Dysfunctions associated with sleep, sleep stages, or partial arousals.

GREAT Sleep architecture

Every 90 minutes

GREAT Sleep has 4 stages
Each stage builds on the others

1. Stage 1
2. Stage 2
3. Stage 3
4. REM Sleep
Disorders of initiating or maintaining sleep

Difficulty getting to sleep
Difficulty staying asleep
Not feeling rested the next day

Insomnia Classifications:
Primary vs Comorbid

**Primary insomnia is a DSM-IV-TR classification:**
- >1 month duration
- Impaired next-day functioning
- Independent of another sleep or mental disorder
- Not due to a substance, medication, or medical condition

**Comorbid insomnia is described by DSM-IV-TR as insomnia +:**
- psychiatric disorder
- medical condition
- substance use

Insomnia Treatment Summary

1. Sleep history, history, history
2. R/O OSA, RLS, depression, anxiety
3. Cognitive Behavioral Therapy
4. Medications to treat sleep initiation or sleep maintenance
5. Sleep diary to document baseline and changes with interventions
Sleep-related breathing disorders

Sleep-related breathing disorders (SRBD), also known as sleep-disordered breathing, describes a number of conditions in which there are pauses in breathing or a low intake of air.

Obstructive Sleep Apnea is the most famous

Sleep related breathing disorders

• **Upper airway resistance syndrome** symptoms and treatments are similar to those of sleep apnea. The source of breathing problems with upper airway resistance syndrome is in the upper airway, not deeper in the throat as with sleep apnea. Also, the condition does not result in a lack of oxygen in the blood, which occurs with apnea.

• **Central sleep apnea (CSA)** is different from OSA in that both air intake and the effort to breathe stop. Patients with CSA do not take in oxygen and do not attempt to breathe. In contrast, with OSA, attempts to breathe do not stop.

SRBD - continued

• **Cheyne-Stokes breathing** is a specific pattern of breathing associated with central sleep apnea. The average person will not be able to identify and differentiate Cheyne-Stokes breathing compared to other breathing patterns, but it is a term you might hear from a healthcare professional.

• **Hypopnea** is breathing in an unusually low amount of air. As with apnea, hypopnea can be obstructive or central. The difference is that while hypopnea results in a reduced amount of air intake, apnea results in breathing stopping completely.
Annie Lamott

- Also, 91 percent of men snore loudly – badly, like very sick bears. I would say that CPAP machines are the greatest advance in marital joy since the vibrator. It transforms an experience similar to sleeping next to a dying silverback gorilla into sleeping next to an aquarium.
Snoring occurs when the collapsible parts of the airway vibrate during breathing. It can be accentuated by vibrations of the lips, cheeks, and tongue. Click to find out more about the causes of snoring:
- **MUSCLE TONE**
- **BULKY TISSUES**
- **SOFT PALATE**
- **and/or UVULA**
- **SINUS**

**SOURCES:** Encarta Encyclopedia, American Academy of Otolaryngology - Head and Neck Surgery, Inc.

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**Oral Appliance**

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**Figure 1. The Mallampati score:**
- Class 1. Complete visualization of the soft palate.
- Class 2. Complete visualization of the uvula.
- Class 3. Visualization of only the base of the uvula.
- Class 4. Soft palate is not visible at all.
Treatment for SRBD

- Open up airway through all sleep stages
- CPAP
- BiPAP
- Oral Appliances
- Weight loss
- Pain medication timing

Disorders of excessive somnolence

In the International Classification of Sleep Disorders, hypersomnia symptoms are the essential feature of three disorders:
1. Insufficient sleep syndrome.
2. Hypersomnia -idiopathic, recurrent or posttraumatic.
3. Narcolepsy.
Treatment for EDS

- Treat underlying problem first
- Stimulants
- Timed napping
- Modafinil – FDA approved for EDS associated with narcolepsy, shift work sleep disorder, EDS related to OSA
Disorders of Sleep-Wake Cycle

Individuals with circadian rhythm sleep disorders present with symptoms of insomnia or hypersomnia and complain of an inability to sleep at the desired time.

1. Extrinsic: caused by external factors like jet lag, shift work sleep disorder

2. Intrinsic: caused by internal abnormalities like advanced phase or delayed phase syndrome.
Treatment for Sleep–Wake Cycle Disorders

1. Light exposure specifically timed
2. Melatonin – no scientific data to support
3. Wake time regimen to ground circadian rhythm
4. Sleep restriction
5. Stimulants/caffeine/modafinil

Dysfunctions with sleep stages or partial arousals.

- **Parasomnias** are a category of sleep disorders that involve abnormal and unnatural movements, behaviors, emotions, perceptions, and dreams that occur while falling asleep, sleeping, between sleep stages, or during arousal from sleep. Most parasomnias are dissociated sleep states which are partial arousals during the transitions between wakefulness and non-REM sleep, or wakefulness and REM sleep.

Parasomnias

- NREM parasomnias are arousal disorders that occur during stage 3 (SWS). They are caused by a physiological activation in which the patient’s brain exits from SWS and is caught in between a sleeping and waking state. In particular, these disorders involve activation of the autonomic nervous system, motor system or cognitive processes during sleep or sleep-wake transitions.
Non REM parasomnias

Sleepeating
Sleep sex,
Teeth grinding,
Rhythmic movement disorders,
Restless legs syndrome,
Somniloquy

Treatment of Restless Legs

Treatment Non REM Parasomnias

- Safety
- GABA
- Combinations of dopaminergic agents, opiates, and trazodone, as well as topiramate have been used with some success
REM parasomnias – REM Behavior Disorder

- Demographically, 90% of RBD patients are males, and most are older than 50 years of age.¹⁰
- Typical clinical features of REM sleep behavior disorder are:
  - Male gender predilection
  - Mean age of onset 50–65 years (range 20–80 years)
  - Vocalization, screaming, swearing that may be associated with dreams
  - Motor activity, simple or complex, that may result in injury to patient or bed-partner
  - Occurrence usually in latter half of sleep period (REM sleep)
  - May be associated with neurodegenerative disease

Treatment RBD

- Benzodiazepines
- Other agents, such as some tricyclic antidepressants, levodopa, and dopamine agonists, may also be effective

Prognosis for Sleep Disorders

The prognosis depends on the specific disorder. Children usually outgrow sleep disorders. Patients with Kleine-Levin syndrome usually get better around age 40. Narcolepsy is a life-long disorder.
QUESTIONS

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