

Insomnia Management

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We would like to acknowledge that we are gathered today on the traditional territories of the Musqueam, Squamish and Tsleil-Waututh peoples.

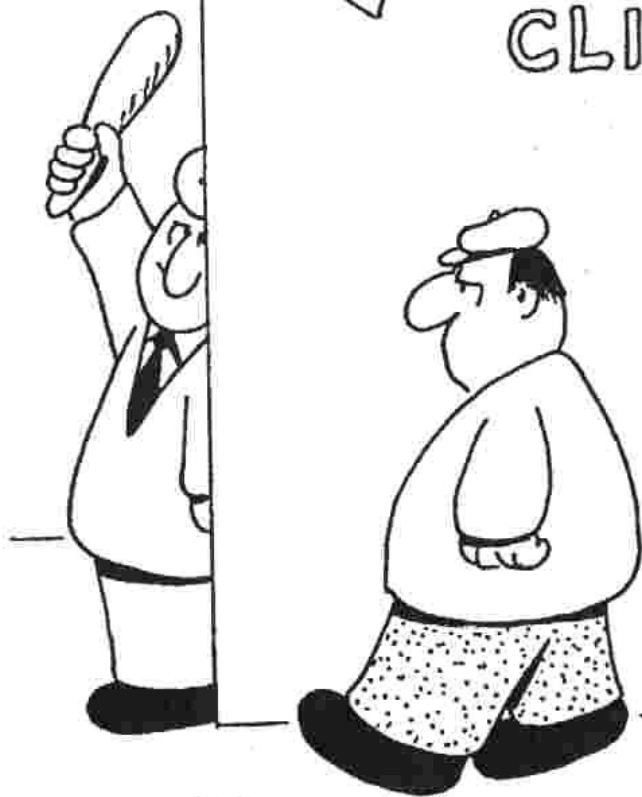


Meet Mia



- 28 year old teacher with a 5 year history of difficulty initiating and maintaining sleep.

← SLEEP
DISORDER
CLINIC



Insomnia

- Difficulty initiating, maintaining or returning to sleep, or of un-refreshing sleep associated with daytime sequela.
- Insomnia is a symptom, not a diagnosis!

Prevalence of Insomnia

- 30-50% of the general population have trouble sleeping at least 3 nights/week in any given year
- Up to 69% of patients who see a family physician have an underlying sleep disorder
- 10% of the general population suffer from chronic insomnia
- Only 5% are likely to be treated
- Approximately 500,000 people suffer from untreated insomnia in BC

Risks of Insomnia

- Twice the risk of ischemic heart disease
- 2.5 times the risk of having a MVA
- miss 5.2 more days of work per year, seek medical care more frequently and are admitted to hospitals more often than good sleepers.

Insomnia as a Risk Factor for Psychiatric Disorders

For people with insomnia longer than 1 year:

- 40 times increased risk for developing major depression.
- 25 times increased risk for developing new-onset phobia, obsessive compulsive disorder or panic disorder.

Ford et al, *JAMA* 262:1479-84, 1989

Impact of Sleep Disturbances on the Course and Treatment of Depression

- Sleep difficulties fail to resolve in 20 – 44%.
- Residual insomnia increased the risk of relapse of depression as well as decreased concentration, sleepiness and diminished performance capacity.
- Over 32 studies linking sleep disturbance to suicidal ideation or completed suicide. Insomnia is overlooked as a suicide risk.
- Sleep disorders lead to slower treatment response, lower remission rates and poorer quality of life
- CBTi doubled the remission rate compared to controls.

Krystal, A *Neural Clin.* 2012; 30(4): 1389 - 1413

Table 46-2. DIFFERENTIAL DIAGNOSIS OF SLEEP DISORDERS

Insomnia Disorders (Difficulty in Initiating or Maintaining Sleep)

Associated With Behavioral-Psychophysiological Disorders

Adjustment sleep disorder
Psychophysiological insomnia
Inadequate sleep hygiene
Limit-setting sleep disorder
Sleep-onset association disorder
Nocturnal eating (drinking) syndrome
Other

Associated With Psychiatric Disorders

Psychoses
Mood disorders
Anxiety disorders
Panic disorder
Alcoholism
Other

Associated With Environmental Factors

Environmental sleep disorder
Food allergy insomnia
Toxin-induced sleep disorder
Other

Associated With Drug Dependency

Hypnotic-dependent sleep disorder
Stimulant-dependent sleep disorder
Alcohol-dependent sleep disorder
Other

Associated With Sleep-Induced Respiratory Impairment

Obstructive sleep apnea syndrome
Central sleep apnea syndrome
Central alveolar hypoventilation syndrome
Chronic obstructive pulmonary disease
Sleep-related asthma
Altitude insomnia
Other

Associated With Movement Disorders

Sleep starts
Restless legs syndrome
Periodic limb movement disorder
Nocturnal leg cramps
Rhythmic movement disorder
REM sleep behavior disorder
Nocturnal paroxysmal dystonia
Other

Associated With Disorders of the Timing of the Sleep-Wake Pattern

Short sleeper
Time-zone change (jet lag) syndrome
Shift work sleep disorder
Delayed sleep phase syndrome
Advanced sleep phase syndrome
Non-24-h sleep-wake syndrome
Irregular sleep-wake pattern
Other

Associated With Parasomnias (Not Otherwise Classified)

Confusional arousals
Sleep terrors
Nightmares
Sleep hyperhidrosis
Other

Associated With the CNS (Not Otherwise Classified)

Parkinsonism
Dementia
Cerebral degenerative disorders
Sleep-related epilepsy
Fatal familial insomnia
Other

Associated With No Objective Sleep Disturbance

Sleep state misperception
Sleep choking syndrome
Other

Idiopathic Insomnia

Other Causes of Insomnia

Sleep-related gastroesophageal reflux
Fibrositis syndrome
Menstrual-associated sleep disorder
Pregnancy-associated sleep disorder
Terrifying hypnagogic hallucinations
Sleep-related abnormal swallowing syndrome
Sleep-related laryngospasm
Other

Excessive Sleepiness

Associated With Behavioral-Psychophysiological Disorders

Inadequate sleep hygiene
Insufficient sleep syndrome
Limit-setting sleep disorder
Other

Associated With Psychiatric Disorders

Mood disorders
Psychoses
Alcoholism
Other

Associated With Environmental Factors

Environmental sleep disorder
Toxin-induced sleep disorder
Other

Associated With Drug Dependency

Hypnotic-dependent sleep disorder
Stimulant-dependent sleep disorder
Other

Associated With Sleep-Induced Respiratory Impairment

Obstructive sleep apnea syndrome
Central sleep apnea syndrome
Central alveolar hypoventilation syndrome
Sleep-related neurogenic tachypnea
Other

Associated With Movement Disorders

Periodic limb movement disorder
Other

Associated With Disorders of the Timing of the Sleep-Wake Pattern

Long sleeper
Time-zone change (jet lag) syndrome
Shift work sleep disorder
Delayed sleep phase syndrome
Advanced sleep phase syndrome
Non-24-h sleep-wake syndrome
Irregular sleep-wake pattern
Other

Associated With the CNS (Not Otherwise Classified)

Narcolepsy
Idiopathic hypersomnia
Post-traumatic hypersomnia
Recurrent hypersomnia
Subwakefulness syndrome
Fragmentary myoclonus
Parkinsonism
Dementia
Sleeping sickness
Other

Insomnias

- Adjustment Sleep Disorder
- Restless Legs Syndrome
- Psychophysiological Insomnia
- Delayed Sleep Phase Syndrome
- Shift Work Sleep Disorder
- Inadequate Sleep Hygiene
- Associated with Psychiatric Disorders
- Associated with Medical Disorders
- Associated with Medications

Restless Legs Syndrome

- Trouble getting legs comfortable or keeping them still when inactive or in evening
- “Creepy-crawly” sensations
- History of sciatica or paresthesias
- History of iron deficiency, diabetes, or chronic renal failure

Ask all patients with insomnia...

- Do you have trouble getting your legs comfortable or keeping them still in the evening?
- Do you get “creepy-crawly” sensations in your legs when you sit and relax for a while?

Need to differentiate from pain interfering with sleep.

RLS is a “discomfort” but is not “painful”.

Common Treatment for RLS/PLMD

- Avoid caffeine, alcohol, OTC sleep aids containing Diphenhydramine (Nytol), anti-depressant or anti-psychotic medications.
- Pramipexole 0.125 – 1mg
- Gabapentin 100-900mg

(meds taken 1 hr before bed or 1 hr prior to symptoms starting in evening)

- Iron supplementation if ferritin less than 50
- If pain is an aggravating or confounding factor then Gabapentin or an opioid may be a first choice.

Adjustment Sleep Disorder (Transient Insomnia)

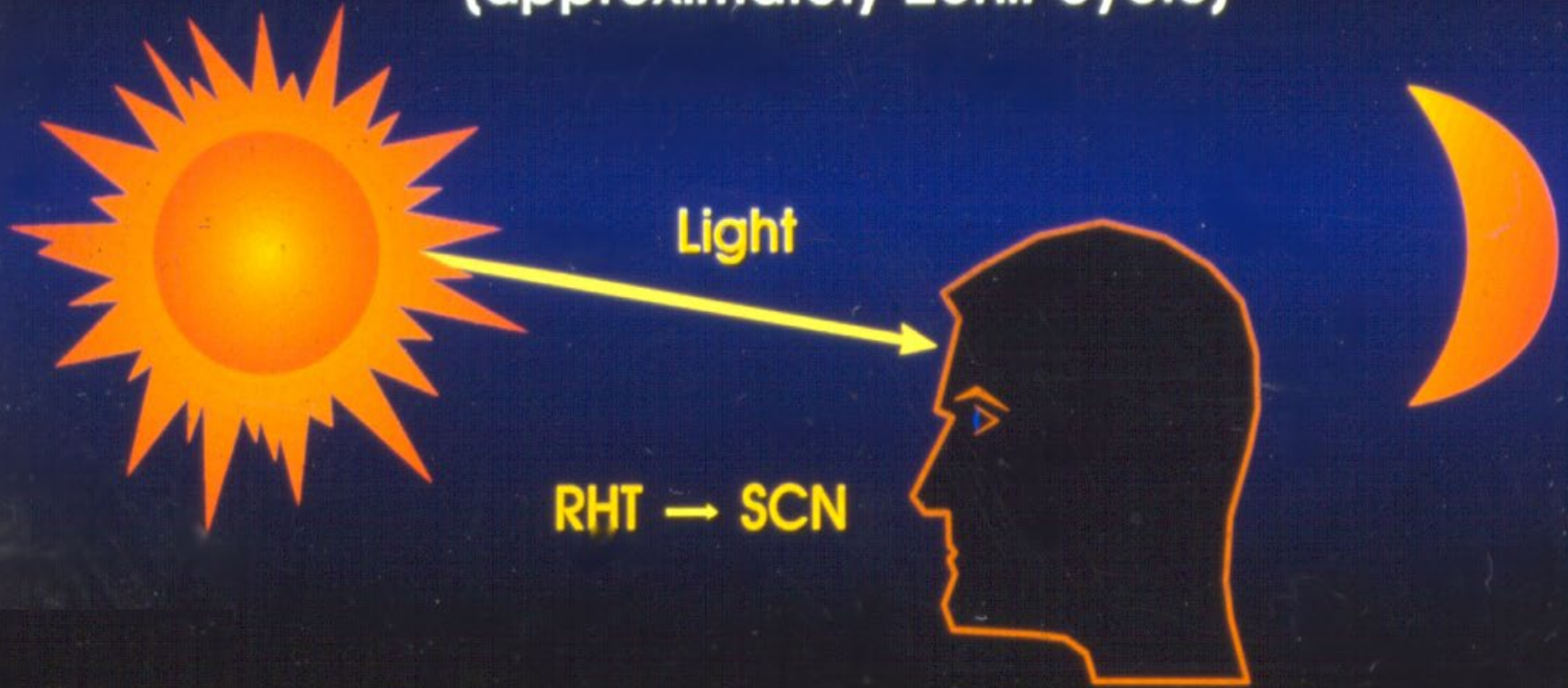
- A sleep disturbance temporally related to acute stress, conflict or environmental change that causes emotional arousal.

Tx of Adjustment Sleep Disorder

- Sleep Program
- Short acting hypnotics:
 - zopiclone (Imovane)
 - zolpidem (Sublinox)
 - lemborexant (Dayvigo)
 - daridorexant (Quvivig)

Sleep is Regulated by the Biological Clock

(approximately 25hr. cycle)



Delayed Sleep Phase Syndrome

- Habit of going to bed late and sleeping in
- Feels rested if allowed to go to bed when sleepy and wake up on own

Tx Delayed Sleep Phase Syndrome

- Sleep Program
- 30-45 min. bright light within first hour of normal wake up time.
- May advance alarm and subsequent bedtime 30-60 every 1-3 days.
- Maintain regular sleep schedule. Do not sleep in later than one hour!

Shift Work Related Sleep Disorder

- Shift workers make up 20% of the work force.
- Shift workers get an average of 2 hours less sleep/night than non-shiftworkers.
- Problems of trying to stay awake when the body wants to sleep, and trying to sleep when the body wants to be awake.

Shift Work Sleep Management

- Sleep Program
- Negotiate with family adequate protected time for sleep.
- Create a cool, dark, quite “cave” for daytime sleeping at home on night shifts.
- On night shifts, use bright light before shift and sunglasses returning home.
- Prepare for shift changes on time off and use this time to catch up on sleep (not on a second job).

Psychophysiological Insomnia

- Habit of thinking, worrying, planning or problem solving in bed
- Watching the clock, and having anxious, frustrating or angry thoughts about inability to sleep
- Feel nervous or tense in bed
- Light sleeper hearing every little noise

Take a Sleep History

History of present symptom/illness

- When did your sleep problems start?
 - Was there a trigger?
- How frequently do you experience these sleep problems?
- Is there anything that makes it better?
- Is there anything that makes it worse?
- What impact do these sleep problems have on your life?

Take a basic sleep history

- What time do you go to bed?
- What time do you put everything off and try to go to sleep?
- How long does it take for you to fall asleep?
- Do you wake up during the night? If so, how often?
- How long does it take to fall back asleep?
- What time do you wake up?
- What time do you get out of bed?

Estimated sleep time _____

Mia's Sleep History



- Insomnia began after daughter was born. Even though her daughter now sleeps through the night, she still has insomnia
- No significant pain, restless legs, anxiety, depression or excess stress
- She has tried sleep hygiene and guided imagery

Mia's Sleep History - continued

- She is busy doing chores up until going to bed at 9 pm and watches TV or scrolls on phone for an hour until she feels sleepy.
- Lights out at 10 pm and takes an hour to fall asleep
- Wakes up 3 times taking 20 minutes to return to sleep
- Wakes finally at 5 am and can't get back to sleep, arising at 6 am after what feels like 3 – 4 hours of sleep feeling exhausted.

Mias' Sleep History - continued

- 9 hours in bed
- Actually sleeping closer to 5 hours
- In bed awake “practicing insomnia” 4 hours per night.

Cognitive Behavioral Therapy for Insomnia (CBTi)

- A form of psychotherapy that addresses dysfunctional thoughts along with maladaptive behaviors through problem focused and action oriented strategies.
- Works for 80% of patients with Psychophysiological Insomnia
- Of those that respond to CBTi, 80% of those respond to the behavioral component alone.

Dysfunctional Beliefs & Attitudes About Sleep

- Is this belief about my sleep accurate? eg: Do I always experience daytime impairments after a poor night sleep?
- What is the evidence supporting this belief? eg: Contrary to my usual thinking, I sometimes I function quite well after a poor night. Sometimes I feel poorly even after a full night's sleep.
- Is there a more productive way to think about my sleep? eg: It is possible that other factors may also be contributing to these daytime consequences.

Behavioral Therapy: Re-conditioning Good Sleep

- Based on the principles of Pavlovian conditioning
- Just have to do it. Works whether you believe in it or not.
- 80% success rate assuming no significant un-controlled pain, anxiety, depression or excessive stress
- Consistency is the key to conditioning
- Need to do the whole program every night

Brief Behavioral Program for Insomnia (BBTi)

- Can be initiated in a 10 minute office visit
- Takes a couple of months to work through
- Most patients notice significant improvement in first month
- First couple of weeks most difficult
- Key to conditioning is consistency

4 Essential Habits

- Take an hour to wind down, no screens
- Set an alarm, don't look at the clock
- Use relaxation to fall asleep and return to sleep
- Get out of bed if can't sleep

3 Phases

- Consolidate Sleep (“sleep restriction”-is not actually restricting sleep, but just limiting time in bed awake)
- Expand Sleep
- Withdraw off of sleep medications.

Mia's Sleep Program

- Limit time in bed between 11 pm to 5 am



Mia's 1 month follow up



- Taking an hour to wind down before bed
- Bedtime 10 pm
- Falling asleep in 20 minutes with relaxation
- Wakes 2 – 3 times, returning to sleep in 10 – 15 minutes with relaxation
- Wakes finally at 6 am with alarm after 7 hours of sleep feeling more rested but still tired.
- Advised to delay alarm 30 minutes at a time until sleeping 8+ hours.

Hypnotic Medication Withdrawal

- First train to become a good sleeper
- Then train to get enough sleep to feel rested.
- Then reduce hypnotic $\frac{1}{2}$ pill at a time while at the same time going to bed 2 hours later for 5 nights.
- After 5 nights, gradually advance bedtime routine 30 minutes every 2 nights
- Wait 2 weeks to recover and then repeat process until off all hypnotics

Resources

- More information about the **Program for Improved Sleep**, or general information about other sleep disorders can be found at:
- www.GoodSleepHealth.ca
- More information about Clinical Services can be found at:
- www.TheSleepClinics.ca