Bedtime Blues: Managing Primary Insomnia

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Table 1

Types of insomnia

- **Primary:** A function of "hyper-arousal" that disrupts the normal neurobiology of sleep induction and maintenance of sleep.
- **Secondary:** A function of an underlying process that disrupts the sleep state.

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Insomnia, as defined by the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), is difficulty initiating and/or maintaining sleep or nonrestorative sleep, resulting in daytime consequences of fatigue, irritability and poor daytime functioning (Table 1).

Frank's Fatigue

Frank, 38, is an accountant working in a stressful corporate environment. He presents with a three-month history of sleep disruption and a recent problem of difficulty falling asleep.

- He has a shot of whiskey before bed, but continues to wake three to four times a night.
- He is often woken up by his snoring.
- He drinks three to four large cups of coffee a day.
- He has stopped exercising due to fatigue and lack of time.

For more on Frank, go to page 68.

How common is insomnia?

Insomnia, nonrestorative sleep and daytime fatigue are common clinical complaints in primary care. The 2001 National Sleep Foundation "Sleep in America Poll" estimated the prevalence of insomnia to be 10% to 20%.[1] Furthermore, 82% of physicians surveyed by the 2000 National Sleep Foundation believe daytime fatigue is a consequence of insomnia.[2]

Table 2

Nonpharmacologic advice for patients[3]

Sleep hygiene/sleep behaviour

- Relax for 1-2 hours before bed; calm the mind
- Keep bedroom dark, quiet and at a comfortable temperature
- Maintain regular sleep schedule and get outside light exposure in the morning
- No caffeine after 2:00 pm and no nicotine after 4:00 pm; limit evening alcohol consumption to one drink at supper
- Take relaxing evening walk or bath three hours before bedtime

Sleep restriction/sleep window

- Maintain regular sleep schedule and go to bed later if you have trouble falling asleep; reduce time in bed by one hour if you are having trouble with insomnia to improve your sleep efficiency (SE) [SE = Total time asleep/Total time in bed]
- Napping should be limited to 20-30 minutes; should be done between 2:00 pm and 4:00 pm and should not be done if it has a negative effect on sleep quality at night

Stimulus control

- Do not watch/check the clock at night
- Do not exercise vigorously within 4-5 hours before sleep
- If you cannot sleep, get out of bed and relax; return to bed when you feel sleepy
- Learn to relax the mind through meditation or relaxation tapes/ exercises

Only 48% of physicians routinely screen for sleep problems.

Do patients with problems initiating sleep share common characteristics?

Patients with difficulty initiating sleep often:

- describe a "racing mind" and are anxious,
- are typically busy and fast-talking,
- have obsessive traits and perfectionist behaviour,
- have unrealistic expectations of sleep,
- find it difficult to relax and do not set aside time for themselves and
- adopt behaviours that are counter-productive to sleep (such as drinking too much coffee during the day, going to bed early and watching the clock at night).

What can a physician do?

Sleep disruption is a consequence of lifestyle, primary medical illness and primary sleep disorders. It is important for the physician to distinguish between tiredness, fatigue (mental and physical) and excessive daytime sleepiness because of the effect of these conditions on daytime functioning. The effects will vary from person to person and can be quite devastating, possibly resulting in occupational disability.

Helping Frank Fall Asleep

Frank needs to have his insomnia sorted out with a focus on nonpharmacologic measures (Table 2) and stress management.

Once his sleep improves, he should be evaluated for sleep apnea.

Patients who complain of disrupted, nonrestorative sleep must be questioned for primary sleep disorders such as sleep apnea, restless leg syndrome, periodic limb movement disorder or parasomnia.

What pharmacologic treatments can doctors use?

Try to stay away from benzodiazepine sedative-hypnotics for primary insomnia. Non-benzodiazepine sedative-hypnotics (zopiclone and zaleplon) are the best choice for primary

insomnia and should be used short-term with a limited prescription and close followup to limit dependence.

Tricyclic antidepressants (TCAs) work best in patients with pain syndromes (such as fibromyalgia) and should be given in low doses. Also, trazondone, 50 mg to 150 mg, one to two hours before bedtime, is an excellent alternative to the previously mentioned medications.[4]

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What is the difference between zopiclone and zaleplon?

Zopiclone has a longer life and onset of action and tends to be better for initial and maintenance insomnia. Zaleplon is used for initial or maintenance insomnia because of its quick onset of action (15 to 30 minutes) and short duration of action (three to four hours).

When should a patient be referred for a sleep medicine consultation?

A patient presenting with a complicated sleep problem, excessive daytime sleepiness or sleep apnea should be referred for sleep medicine evaluation. If, after three months of treating primary insomnia, the patient is not improving, it is appropriate to refer him/her for a sleep medicine consultation.

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Take-home message

- Take a sleep history and consider the differential diagnosis.
- Before prescribing sedatives, consider working on sleep hygiene, sleep restriction and stimulus control issues.
- The management plan must include monitoring, interventions and followups to insure patient adherence and motivation.
- Refer the patient to a sleep medicine consult if you suspect a primary sleep disorder that requires sleep investigations or if the patient has not progressed in 12 weeks.

References
1. National Sleep Foundation: 2001 "Sleep in America" Poll. Washington 2001.
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3. Morin C: Insomnia: Psychological Assessment and Management. The Guilford Press, New York, 1993.
4. National Steering Committee Report: Rationale for guidelines on the use of sedative-hypnotic medications. Can J Diagn 2002; 19(10):Supplement.