



Sleep Problems Update

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Number 15

Case Study: Circadian Phase Delay Insomnia

Patient: W.P., a 55 y/o divorced woman living alone.

Problem: For over 4 years following treatment for cancer, W.P. had been going to bed at 10 pm but “never felt sleepy” and never fell asleep until around 4 am. She could sleep deeply until noon. However, she had a great deal of trouble waking up earlier and was frequently late for work. She felt groggy until late afternoon, resulting in cognitive problems until then.

W.P. reported trying many hypnotics (prescription and OTC), but to no avail. She admitted to being discouraged and depressed over sleep and was worrying about getting “back to normal.”

She has other conditions that also affect her sleep. She has sleep apnea requiring CPAP. Medically she has low TSH, which could affect her sleep, and thus takes thyroxin. She was also taking a statin in the evening to reduce her cholesterol level, but this could have been contributing to her insomnia. Finally, she is taking an antidepressant known to cause drowsiness and/or insomnia.

Diagnosis: Circadian Rhythm Sleep Disorder, Delayed Sleep Phase Type (327.31).

Treatment: The primary treatment was *Sleep Deprivation with Phase Advance*. That is, for one night per week she totally skipped sleep. The following night she went to bed about 90 minutes earlier than she had the previous week. This continued until she arrived at a more desirable bed time and could more easily awaken in time to get to work. Additionally her exposure to bright light was controlled (to assist in advancing her sleep phase) by having her wear

special dark glasses in the evening prior to bed-time and a visor in the morning with LEDs (light emitting diodes) that direct

bright light into her eyes.

As supplements, she was instructed to not “sleep-in” on weekends. With the cooperation of her PCP, the time that she took the statin was moved to the morning and the time she took the antidepressant adjusted so that it produced less drowsiness during the day but less sleep interference at night.

Outcome: After several weeks of this routine, she was feeling sleepy and able to fall asleep at 11 pm. She still struggled with getting up in morning, but has been able get to work by 9 am fairly consistently.

Did You Know?

Sleep is determined by three things: sleepiness that builds in proportion to the time awake; the phase of the body’s circadian clock; and things in a person’s situation, body, and mind that can hinder or help the ability to fall and stay asleep.

Most insomnia is caused by the third factor when the hinderers are too strong relative to the helpers. But for some, like W.P., insomnia occurs when the phase of the circadian clock is delayed. The differential diagnosis for this is 1) inability to fall asleep before the early morning hours, 2) sleeping well once asleep, but 3) great difficulty waking until late morning or early afternoon, and 4) not feeling awake and alert until later in the day. Treatment with sleeping pills is usually ineffective but there are several ways of forcing the phase of the circadian clock to change to a more desirable setting.

Dr. Moorcroft of Northern Colorado Sleep Consultants welcomes referrals for insomnia, nightmares, and children’s sleep problems. Offices in Fort Collins, Loveland, Greeley, and Denver. Call (970) 308-4495 or email Bill@sleeplessincolorado.com.

More recently W.P. has arranged to have a friend call her at 7:30 am, which helps her get up, and she started taking Rozerem (which works on the circadian clock’s melatonin receptors) at bedtime to assist her in falling asleep.

Importantly, she is feeling better about her sleep and her ability to function when awake is much improved.