Sleep Disturbance Management Tips for Health Care Professionals

Guiding Principles: A common and multifactorial problem.

Step 1. Top underlying treatable causes and diagnosis:

- Both cancer treatments and cancer-related symptoms can contribute to insomnia (difficulty falling asleep, maintaining sleep, wakening too early or poor sleep quality, and impaired day-time functioning)
- Identify contributing causes:
    - Unrelated to cancer / therapy: e.g. sleep apnea, restless leg syndrome
    - Depression (see depression tip), anxiety (see anxiety tip), existential spiritual distress or other psychiatric/ psychological disorders have a higher prevalence in cancer palliative population
    - Drugs: e.g. corticosteroids, stimulants, diuretics
    - Poor symptom control: pain, dyspnea, pruritus, sweating, diarrhea, tenesmus

Step 2a. Non-pharmacological management:

- Address contributing causes (if able)
- Sleep Hygiene (stimulus control treatment, regular schedule and bedtime routine, only go to sleep when sleepy, get up / read etc. if sleep latency >30 min, avoiding daytime naps)
- Dark room, reduce ambient noise
- Avoid caffeine
- Cognitive Behavioral Therapy
- Relaxation, exercise (if able), mindfulness meditation
- Exercise/physical activity during the day as able
- Warm milk (releases tryptophan which is a natural sleep aid)
- A warm bath a few hours before bed (allows the body core to initially heat up and then gradually cool down in the hours prior to going to bed – mimicking what normally happens when we sleep)
- Warm blanket from the dryer wrapped around the core when first going to bed (not a heating blanket as you want the blanket temperature to decrease over time)

Step 2b. Pharmacological options:

Mild symptom:

- Many of the non-sedative hypnotics have a lower evidence of efficacy for sleep initiation and maintenance but are suggested to trial first due to a lower adverse effect profile. This is especially applicable in the ***elderly*** population
- Tailor selection to patient co-morbidities, concurrent medication interactions and side-effects
- Note: Limited evidence for most medications
- Melatonin 2-4 mg po qhs (least side-effects)

- Mirtazapine 7.5 mg po qhs (sedating at <15 mg, i.e. no need to titrate up if ineffective at lower doses)
- Trazadone 50 mg po qhs (Caution: avoid in ***dementia*** patients)
- Doxepin 3-6 mg po qhs

Moderate to severe symptoms (refractory to above):

- Non-benzodiazepine receptor agonists like analogues (Zopiclone 3.75-7.5 mg po qhs (***Elderly*** or ***frail***: maximum of 5 mg)) can be tried for a short term in conjunction with non-pharmacological therapies and reassessed for efficacy and tolerability
- Short-Acting Benzodiazepines (Lorazepam 0.5-1.0 mg) (avoid in ***elderly***)
- Limited evidence: Low dose sedating antipsychotic (Quetiapine 12.5-25 mg po qhs) may be tried if there is **no history of** Parkinsons disease or extra-pyramidal symptoms with neuroleptics and not ***elderly***. Antipsychotic may be useful if other coexisting symptoms may also be beneficially treated (nausea, delirium with marked aggression/agitation and vivid dreams)

Step 3. When to refer to specialists:

- If insomnia symptoms worsening despite above treatments
- Psychosocial Oncology: concomitant depression or anxiety
- Palliative Care:
    - Concomitant physical symptoms (e.g. pain, nausea) that are difficult to control and contributing to insomnia.
    - Existential distress requiring involvement of multidisciplinary team

For more detailed information on Sleep Disturbance visit:
A Pan-Canadian Practice Guideline: Prevention, Screening, Assessment and Treatment of Sleep Disturbances in Adults with Cancer, Toronto: Canadian Partnership Against Cancer (Cancer Journey Advisory Group) and the Canadian Association of Psychosocial Oncology, December 2012.
https://www.cancercareontario.ca/sites/ccocancercare/files/assets/CCOSleepGuideline.pdf

End of Life Considerations:
In EOL, pharmacotherapy with sedative hypnotics may have a higher adverse effect profile (e.g. delirium, daytime sedation and fatigue, fall risks etc.).

Choosing a medication that achieves both nighttime sedation and treats the other prevailing symptoms may help reduce polypharmacy (e.g. if also neuropathic pain, use Gabapentin or nortriptyline).

NOTE: Guidelines do not replace individualized care and clinical expertise.

References:

1. Davis M, Goforth H Fighting Insomnia and Battling Lethargy: The Yin and Yang of Palliative Care. Curr Oncol Rep (2014) 16:377
2. Howell D, Oliver TK, Keller-Olaman S, Davidson J, Garland S et al. A Pan-Canadian Practice Guideline: Prevention, Screening, Assessment and Treatment of Sleep Disturbances in Adults with Cancer, Toronto: Canadian Partnership Against Cancer (Cancer Journey Advisory Group) and the Canadian Association of Psychosocial Oncology, December 2012. https://www.cancercareontario.ca/sites/ccocancercare/files/assets/CCOSleepGuideline.pdf
3. Aitkin T, Comai S, Gobbi G. Drugs for Insomnia beyond Benzodiazepines: Pharmacology, Clinical Applications, Discovery. Pharmacol Rev 70:197–245, April 2018
4. Graci G. Pathogenesis and Management of Cancer-Related Insomnia. J Supp Onc. 5(3). 349-59, 2005. https://pdfs.semanticscholar.org/684d/e84c5e5a2e8603712933820f1205bde0a4cb.pdf

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