



Sleep disturbance and the menopause

Many women complain of disturbed sleep during the peri-menopausal period. Complaints about poor sleep include difficulty falling and staying asleep, coupled with early morning and nocturnal awakenings⁽¹⁾.

Sleep duration of less than seven hours a night has been associated with increased mortality⁽²⁾, as well as linked to cardiovascular disease, obesity, mood disorders and diabetes^(3,4).

Contributing factors

- These include⁽¹⁾
 - Changing hormone levels (hormones playing a role in sleep include growth hormone, prolactin, cortisol and melatonin)
 - Vasomotor symptoms (sweating and palpitations), mood disorders (depression and anxiety)
 - Abnormalities of the circadian rhythm
 - Co-morbid conditions (snoring, airway obstruction, restless legs syndrome, periodic limb movement disorder, musculoskeletal pain and fibromyalgia)
 - Exacerbation of primary insomnia
 - Increased risk of developing primary insomnia
 - Lifestyle factors (poor sleep hygiene, irregular schedules, caffeine, alcohol, snoring partner).
- It has been noted that insomnia is more common in women than in men, with 25% of women between the ages of 50 and 64 years having sleep difficulties. Sleep difficulties are more common in post-menopausal than in pre-menopausal women, and more severe in those experiencing a surgical menopause⁽⁴⁾.

Investigation

- Take a thorough history, including the type of sleep disturbances, co-morbid conditions, contributing factors, medications and impact on quality of life⁽¹⁾.
- The Pittsburgh Sleep Quality Index⁽⁵⁾ (measures sleep quality) and Epworth Sleepiness Score⁽⁶⁾ (assesses the degree of sleepiness) may be useful tools.
- Self-reported questionnaires may provide information regarding perceived sleep quality. However, there are discrepancies between the objective and subjective measures, putting the role of laboratory assessments into question⁽¹⁾.
- Objective assessment measures of sleep disturbance may include⁽¹⁾:
 - The use of a sleep diary (to assess issues related to sleep hygiene, duration of sleep and circadian rhythm).
- Tests available during a specialist sleep consultation may include⁽¹⁾:
 - Overnight polysomnography (PSG) (to assess breathing disorders, narcolepsy, movement and circadian rhythm disorders).
 - Wrist actigraphy (to assess sleeping patterns and awakenings on consecutive nights and to provide information on certain sleep disorders, including shift work disorder). This may also be used to assess the response to therapy.
 - Continuous EEG recording will assess the various sleep stages.
 - Respiratory monitoring and leg EMG (to assess disordered breathing or periodic leg movement disorder).
 - Multiple Sleep Latency Tests (MSLT) will assess the time taken to fall asleep.



Management

- Formulating a strategy is dependent on a thorough investigation and evaluation of all contributing factors ⁽¹⁾.
- Strategies may include medications and lifestyle and behavioural modification ⁽¹⁾. (Please refer to AMS Information Sheet '[Lifestyle advice for healthy ageing](#)').
- Lifestyle modification e.g. regular schedules, sleep hygiene, elimination of caffeine and alcohol, appropriate and comfortable bedding and temperatures as well as sleep hygiene should be employed ⁽¹⁾.
- The use of oestrogen, alone or in combination with progesterone, has shown some improvement in subjective quality of sleep ⁽⁷⁻¹⁰⁾. Comparison of placebo to hormone treatment showed mixed results, but did show some improvement in regard to sleep quality and fragmentation as well as self-reported difficulties ⁽¹⁾. Women with hot flushes treated with HRT show a marked improvement in sleep quality ⁽⁴⁾. (Please refer to AMS information sheets '[Menopause - Oestrogen only therapy](#)' and '[Menopause - Combined Hormone Replacement Therapy](#)') Practitioners are reminded to assess the risks associated with HRT prior to commencing this in their patients.
- Hypnotics should not be used in situations other than for acute sleep problems because of their side effects, tolerance and withdrawal issues ⁽¹⁾.
- The serotonin modulating antidepressants have been shown to improve hot flushes, depression and insomnia ^(11, 12). (Please refer to AMS Information Sheet '[Mood problems at menopause](#)').
- Low dose tricyclic antidepressants (TCAs) may assist in alleviating insomnia ⁽¹³⁾, though the effects of different drugs in this class may vary ⁽¹⁴⁾.
- A fixed sleep-wake cycle is important to sleep quality. Melatonin, which declines with age, is an important factor in the maintenance of this cycle ^(15, 16), while exposure to light helps maintain a state of wakefulness ⁽¹⁾. The use of melatonin and light box therapy (both at the appropriate time of day) have been shown to improve the circadian rhythm ^(16, 17).
- CBT, stimulus control and sleep restriction therapies have shown improvement in sleep ⁽¹⁾.

Key points

- Disturbed sleep is a common complaint during the peri-menopausal period.
- Various factors are implicated in the sleep disturbance associated with menopause.
- Management may include medications as well as lifestyle and behaviour modification.

References

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