Case study

OSA in women

When fatigue isn't "just life"

Case Study

Patient overview

Demographics: Female, age 58

Health overview: Post-menopause, no major cardiac history at initial presentation

Presenting issues: Chronic fatigue, mood changes, poor sleep, cognitive fog

Initial presentation

Linda,* a 58-year-old woman, visited her primary care provider (PCP) with complaints of persistent fatigue, irritability, poor concentration and non-restorative sleep, describing her nights as "light sleep" with frequent tossing and turning. Over time, she had tried several over-the-counter and prescription sleep aids—including melatonin, Ambien, trazodone and magnesium—without improvement.

Her sleep disturbances were initially attributed to perimenopause, anxiety and the general stress of a busy lifestyle. Importantly, she reported no loud snoring and her body mass index (BMI) fell within a healthy range.

* Name has been changed to protect patient confidentiality.

Turning point: a clue in the REM

Linda's PCP referred her to a sleep specialist when her fatigue did not improve with medications or lifestyle changes. The specialist ordered a home sleep apnea test (HSAT), which returned as normal based on overall apnea-hypopnea index (AHI). However, closer inspection revealed critical clues:

- Minimal time spent in rapid eye movement (REM) sleep
- Elevated AHI during the limited REM periods

These nuances were flagged by the sleep specialist, who explained that REM-predominant obstructive sleep apnea (OSA) often goes undetected in women. Because REM sleep accounts for a smaller proportion of total sleep time, a high AHI during REM can be diluted by normal breathing during non-REM stages, resulting in an overall AHI that appears within the normal range. To get a more accurate picture of Linda's case, the specialist recommended an in-lab sleep study. However, Linda was initially reluctant to continue, uncertain whether sleep apnea could be the issue.

Cardiovascular link: escalation through atrial fibrillation

Linda was later diagnosed with atrial fibrillation during a cardiology visit. Given the cardiovascular risk, her cardiologist reinforced the sleep specialist's recommendation for a full in-lab sleep study.

That study revealed moderate-to-severe OSA, primarily occurring during REM sleep.

Treatment and follow-up

Despite initial reluctance, Linda began positive airway pressure (PAP) therapy for OSA after an in-lab titration and happily noticed key improvements within the first few days, including:

- **More restful sleep with fewer nighttime awakenings**
- **Sharper thinking**
- **Reduced irritability**
- **Increased daily energy**

Resmed

Key clinical events and opportunities

Key clinical event	Opportunity area
Patient presented with fatigue, irritability and brain fog despite measures to improve sleep quality, but no snoring or observed apneas.	OSA in women, especially post-menopausal women, often presents with subtle, non-specific symptoms. Recommend screening for OSA even in patients without obesity, snoring or witnessed events.
Home sleep apnea test found normal overall AHI, despite ongoing symptoms. A closer look showed elevated AHI during limited REM.	REM-predominant OSA often goes undetected in women, especially when REM sleep is limited and overall AHI appears normal. When fatigue and related symptoms persist, consider additional testing to avoid missed diagnoses.
New diagnosis of atrial fibrillation (AFib) became the trigger for in-lab testing, which ultimately revealed moderate-to-severe OSA.	Use new or worsening cardiovascular findings (like AFib, hypertension, or arrhythmias) as a red flag for possible undiagnosed OSA. REM-related apnea is linked to increased cardiovascular risk in women, and early identification can reduce long-term CVD burden.
OSA diagnosis was delayed until cardiology and sleep specialists became involved following her atrial fibrillation diagnosis.	Earlier, proactive collaboration between PCPs and specialists can uncover underlying conditions like OSA before they escalate. Strong referral pathways and shared clinical suspicion can speed up access to testing, improve diagnostic accuracy and reduce cardiovascular risk.

Conclusion

A woman's risk for OSA increases significantly during and after the menopause transition, making it critical to consider sleep testing earlier in the clinical evaluation when symptoms like fatigue, mood changes or non-restorative sleep persist.

Linda's case illustrates how OSA in women often hides behind familiar clinical narratives like menopause, insomnia or anxiety. But by listening carefully, interpreting sleep studies with nuance and collaborating across specialties, PCPs can uncover a powerful root cause of fatigue and cardiovascular burden.

Patient journey provided by Dr. Audrey Wells

Dr. Wells was compensated by Resmed for preparing this case study.

Audrey Wells, MD is a triple board-certified physician in sleep medicine, obesity medicine and pediatrics with over two decades of clinical experience. A nationally recognized expert in sleep health, she specializes in the diagnosis and treatment of obstructive sleep apnea, insomnia, and related disorders across the lifespan.

Dr. Wells is a trusted educator and thought leader, known for translating complex sleep science into practical, actionable strategies for both primary care providers and specialists. Her clinical focus is on delivering effective, sustainable treatment for sleep apnea using an integrative, patient-centered approach that combines evidence-based therapies with personalized care and strategic treatment layering.

Resmed