

When treating hypertension isn't enough

Uncovering the impact of undiagnosed obstructive sleep apnea

The patient

Demographics: Male, age 56

Health overview: Hypertension, body mass index (BMI) of 27

The problem: Resistant hypertension with no clear cause

- Blood pressure remained poorly controlled despite adherence to 3 anti-hypertensive medications
- Patient reported persistent afternoon fatigue, self-attributed to job stress
- Aside from heavy snoring, patient exhibited no classic signs of sleep apnea such as obesity, witnessed apneas or frequent awakenings

Opportunity moment: Consider obstructive sleep apnea (OSA) earlier in patients with resistant hypertension and non-specific symptoms. These may be subtle signs of underlying OSA, even in the absence of classic risk factors.

The solution: Diagnosing and treating OSA directly

Referral & Diagnosis

- PCP referred to sleep specialist due to resistant hypertension
- In-lab sleep study ordered by sleep specialist revealed moderate to severe OSA:
 - Apnea-hypopnea index (AHI) of 28*
 - Severe oxygen desaturation (SpO₂) in the high 60s–low 70s

Treatment Initiated

- Positive airway pressure (PAP) titration study showed immediate benefit
- Patient reported improved energy and clarity after the first night
- Visual explanations of sleep test data were key in overcoming initial skepticism

Opportunity moment: Early testing or sleep study referral may uncover underlying OSA, allowing for earlier intervention and fewer treatment delays.

Opportunity moment: Engaging patients with data and personalized language can help them understand the benefits of treating OSA.

The outcome: Simplified disease management and improved health

Before OSA diagnosis

- 3 anti-hypertensive medications taken simultaneously
- Poor sleep quality
- Daytime fatigue
- Brain fog
- Stable weight



After OSA treatment

- 1 anti-hypertensive medication with reduced dose
- Restorative sleep
- Increased energy
- Improved focus and mental clarity
- Reduced weight

Opportunity moment: Treating OSA directly and earlier can reduce medication burden, improve quality of life and make comorbid chronic conditions like hypertension easier to manage within primary care.

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.

*AHI values of 5–14 indicate mild OSA, 15–30 indicate moderate OSA and values over 30 are classified as severe.