



# REMOTE SLEEP SCORING

**You're Tired... But  
Your Brain Won't Let  
You Sleep 🤪  
(Insomnia Explained!)**

## **Insomnia Disorder**

---

Good evening.

Today we will discuss one of the most common yet misunderstood sleep disorders:

## **Insomnia Disorder**

This is not simply “bad sleep.”

It is a **clinical condition** that affects brain function, health, and quality of life.

---

## **Definition**

## **Insomnia Disorder**

Insomnia Disorder is defined as:

- Difficulty falling asleep
- Difficulty staying asleep
- Waking up too early and unable to return to sleep

**Despite having adequate opportunity for sleep**

---

## **Diagnostic Criteria**

For a clinical diagnosis:

- Occurs at **least 3 nights per week**
- Persists for **≥ 3 months**
- Causes **daytime impairment**

This distinguishes chronic insomnia from short-term sleep problems.

---

## **Types of Insomnia**

---

## Acute Insomnia

- Short-term
- Triggered by stress or life events
- Lasts days to weeks

---

## Chronic Insomnia

- Long-term
- Persists  $\geq 3$  months
- Often maintained by behavioral and physiological factors

---

## The Sleep System

To understand insomnia, we must understand normal sleep regulation.

Sleep is controlled by:

- Circadian rhythm
- Sleep pressure

In insomnia:

These systems become **dysregulated**

---

## Hyperarousal Theory (High Yield)

The most accepted explanation:

Insomnia is a state of **hyperarousal**

This includes:

- Increased brain activity
- Elevated cortisol
- Increased sympathetic activation

The brain is **too awake to sleep**

---

## What Happens in the Brain

In insomnia:

- Increased metabolic activity
- Reduced sleep drive effectiveness
- Difficulty transitioning into sleep

Even when patients feel exhausted, the brain remains alert.

---

## Common Causes

---

### Psychological

- Stress
  - Anxiety
  - Depression
- 

### Behavioral

- Irregular sleep schedule
  - Excessive screen time
  - Poor sleep habits
- 

### Medical

- Chronic pain
  - Medications
  - Other sleep disorders
- 

## The Insomnia Cycle

A key concept:

- Poor sleep → worry about sleep
- Worry → increased arousal
- Arousal → worse sleep

This creates a **self-perpetuating cycle**

---

## Symptoms

Nighttime:

- Difficulty falling asleep
- Frequent awakenings
- Early morning awakening

Daytime:

- Fatigue
  - Poor concentration
  - Irritability
  - Mood changes
- 

## Objective vs Subjective Sleep

Important concept:

Patients may **perceive** worse sleep than measured.

However:

The distress is real and clinically significant.

---

## Impact on Health

Chronic insomnia is associated with:

Hypertension

Depression

Anxiety disorder

It affects both mental and physical health.

---

## Sleep Architecture Changes

In insomnia:

- Reduced total sleep time
- Increased awakenings
- Reduced deep sleep
- Altered REM patterns

Sleep becomes fragmented and non-restorative.

---

## Diagnosis

---

## Clinical Evaluation

- Sleep history
- Symptom pattern

- Duration
- 

## Sleep Diary

Tracks:

- Sleep timing
  - Awakenings
  - Patterns over time
- 

## Polysomnography (PSG)

Not always required unless:

Another sleep disorder is suspected

---

## Differential Diagnosis

Important to rule out:

- Obstructive Sleep Apnea
  - Restless Legs Syndrome
  - Circadian rhythm disorders
- 

## Treatment

---

### First-Line: Cognitive Behavioral Therapy

Cognitive Behavioral Therapy for Insomnia

CBT-I includes:

- Stimulus control
- Sleep restriction

- Cognitive restructuring

This is the **most effective long-term treatment**

---

## Sleep Hygiene

- Consistent schedule
  - Avoid caffeine late
  - Limit screen exposure
  - Comfortable sleep environment
- 

## Medications

Used when necessary:

- Short-term use
- Sleep aids under supervision

Not first-line for chronic insomnia.

---

## Why CBT-I Works

It addresses:

- Thoughts about sleep
- Behaviors that maintain insomnia

It breaks the insomnia cycle.

---

## Prognosis

With proper treatment:

Significant improvement is possible

Without treatment:

Chronic insomnia can persist for years

---

### **Key Clinical Insight**

Insomnia is not a lack of sleep opportunity.

It is a **dysregulation of the sleep system**

---

### **Summary**

Insomnia Disorder is:

- Difficulty initiating or maintaining sleep
- With daytime impairment
- Driven by hyperarousal and behavioral factors

Treatment focuses on:

- Behavioral therapy
  - Addressing underlying causes
- 

### **Final Message**

Sleep is a natural process.

In insomnia, the brain interferes with its own ability to sleep.

Understanding and retraining the brain is the key to recovery.

# **Remote Sleep Scoring - Weekly Newsletters**