

# **Evaluation of the Sleepy Patient**

David E. Cantral, M.D.

## What is sleepy?

- Fatigued
- Tired
- Worn out
- Lacking energy
- Lack of endurance/shortness of breath

- Sleepiness is the inability to maintain wakefulness at times that an individual should be awake and alert

## Consequences of Sleepiness

- Cognitive and behavioral
- Performance
- Safety
- Immune function
- Appetite
- Cardiovascular
- Mortality

## History and Physical Exam

- Duration of symptoms
- Severity
- Pattern
- Medical problems
- Medications
- Psychological factors
- Occupational history

## H & P

- Body habitus
- ENT exam
- Pulmonary and cardiac exam
- Extremities

## Laboratory Studies

- Thyroid studies
- ABG
- CBC
- General chemistry screen
- Trend oximetry

## Sleep History

- Hours of sleep
- Sleep efficiency
- Sleep onset
- Awakenings
- Naps
- Sleep diary
- Bed partner query

## Quantification of Sleepiness

- Epworth Sleepiness Scale
- Stanford Sleepiness Scale
- Multiple Sleep Latency Test
- Maintenance of Wakefulness Test

# Polysomnography

- EEG
- Respiratory assessment
  - Effort
  - Flow
- Muscle activity
- EKG

## Overview of Sleep Disorders

- Sleep deprivation
- Obstructive Sleep Apnea
- Narcolepsy and Idiopathic Hypersomnolence
- Periodic Limb Movements of Sleep
- Circadian rhythm disturbances

## Sleep Deprivation

- Quality or quantity of sleep that is insufficient to support adequate alertness, performance, and health
- Average person needs 8 hours of sleep with range of 6-10 hours
- Sleep deficit is cumulative to some extent
- Frequent interruption to sleep can have same effect as absolute lack of sleep

## Sleep Deprivation: Assessment

- H & P
- Sleep Diary
- Polysomnography usually not necessary

## Obstructive Sleep Apnea

- Intermittent partial or complete occlusion of airway during sleep
- Sleepiness caused by CNS arousals
- Range of severity
- Increasing incidence
- Associated with age, male sex, obesity

## OSA: Evaluation

- H & P
- Screening studies
- PSG

## OSA: Treatment

- PAP therapy
- Weight loss
- Surgery
- Oral appliances

## Narcolepsy

- Second most common cause of debilitating sleepiness behind OSA
- Incidence: 0.5-1/1000 people

# Narcolepsy

- Daytime sleepiness
- Cataplexy
- Hallucinations
- Sleep paralysis

# Narcolepsy: Evaluation

- H & P
- PSG
- MSLT

## Narcolepsy: Treatment

- Stimulants
- REM-suppressing drugs
- Gammahydroxybutarate
- Sleep hygiene
- Naps
- Psychosocial support

## Periodic Limb Movements of Sleep

- Involuntary intermittent brief movement of part or all of an extremity (usually legs) during sleep
- Not the same as Restless Legs Syndrome

# PLMS: Evaluation

- H & P
- PSG

## PLMS: Treatment

- Benzodiazepines
- Pramipexole
- Ropinirole

## Circadian Rhythm Disorders

- Shift work
- Advanced Sleep Phase Syndrome
- Delayed Sleep Phase Syndrome
- Jet Lag

## Circadian Rhythm Disorders

- DX usually arrived at via history
- Treatments include light therapy, behavioral therapy, pharmacologic agents

**Questions?**