Case Presentations . . . .

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The “But I don't even like doing laundry” case.

45 yo police lieutenant

- Hx of insomnia and occasional snoring w/o ESS
- PSG with RDI of 0.3 with supine RDI of 0.0, O2 96%.
- Rx'd with short acting zaleplon
- Abnormal nocturnal behaviors:
  - Sleep eating (sleep related eating ds vs nocturnal eating ds)
  - Sleep texting
  - Doing laundry

Best response with combination eszopiclone + doxepin.
No further nocturnal events.

Poor responses with suvorexant.
Lessons Learned

- "Complex Behaviors"
  - Behaviors that normally would occur during wakefulness.
  - Sleep eating, sleep driving, sleep phoning/texting, etc.
  - Thought to be slow wave phenomenon with little or no recollection of the events.
  - Thought to be a class effect with non-benzodiazepines, Zolpidem, eszopiclone, zaleplon.

62 yo professional singer with OSA
The “Please don’t mess with my voice” case.

- Described by family members as snoring quite prominently at times w/o gasping, choking or observed apneas.
- Unrefreshed with an Epworth Sleepiness Scale of 4.
- History of underlying HTN.
- Concerns that sleep apnea and/or CPAP may effect her voice.

- Home sleep study with AHI/RDI of 25.6 with min O2 of 82 and 158 minutes spent below 90%.
- Auto pap (CPAP study denied by carrier) with download noted pressures of 6-9cm.
- Feeling more refreshed, loves the water, feeling her throat is more moistened and less dry with CPAP.
Lessons Learned

- Don’t be timid about using CPAP
- Most OSA patients prefer heated humidification.
- EDS is not present in every CPAP patient.
- Even though the baseline ESS score was normal, patients may feel even more refreshed with CPAP.
- Learn strategies to deal with insurance carriers.
- Important to follow up and review download data.

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61 yo heavy equipment operator
The “I saw light” case.

- Snoring with apneas as observed by his wife
- Apneas reported during colonoscopy
- No risk factors.
- PSG with AHI 66, REM AH1 of 72, min O2 55%, CPAP responsive.
- No further episodes with auto PAP with F10 full face mask.

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61 yo heavy equipment operator
The case of “I saw light”

- Recurrent dreams of “being drawn to a bright light, as if I was dying, and then being pulled back.”

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Lessons Learned

- Important to follow up on procedure induced apneas
- Same phenomenon as DIE (drug induced endoscopy)
- Sudden death reported with OSA.
  - > 60 yo
  - AHI > 20
  - Hypoxemia < 78%
- Reinforces risks of untreated sleep disordered breathing.

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Lessons Learned

- 1/3 of sleep apnea patients are not obese.
- Sleep apnea can exist w/o snoring.
- OSA presentation in women may be more subtle in comparison to male counterparts.

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71 yo company owner

The “Hey Doc, I can whistle through my eye” case

- History of prominent snoring with episodes of gasping for air, choking, and observed apneas.
- Hx of HTN, CVD, and atrial fibrillation
- PSG with AHI/RDI of 53.8, min O2 84%, poor response to CPAP with residual high AHI’s.
- Responded to BIPAP.
71 yo company owner  
"Hey Doc, I can whistle through my eye"

- With CPAP/BIPAP, he experienced an uncomfortable sensation of left eye discomfort and drying.
- History of left cranial trauma age 20 with multiple surgical interventions.
- Residual fistula between the left naris, left sinuses, and left orbit.
- If he blows his nose, "air will come out of his left orbit"
- Referred to ENT for hypoglossal nerve stimulator implant

Lessons Learned

With atrial fibrillation or difficult to control BP, think OSA.

- Metabolic syndrome (HTN, DM, hyperlipidemia, obesity)
- Syndrome Z (metabolic syndrome + OSA)

97 yo retired educator  
The “She’s now become a different person” case

- History of long-standing dementia dating back to age 89.
- Profound cognitive impairment with a MMSE score of zero/30.
- Underlying hypertension, glucose intolerance, and hyperlipidemia.
- Prominent excessive daytime sleepiness
97 yo retired educator
The “She’s now become a different person” case

- PSG with RDI of 15.8, baseline O2 of 96% with min O2 of 84%.
- 69 centrals, 26 obstructives, 32 hypopneas.
- Initiated on auto PAP at 4-20 with a small Mirage nasal mask.
- Download data 90% usage > 4 hours per night with an average of 6 hours and 53 minutes with an AHI of 1.1, max pressure of 19.9 and a median pressure of 12.6.

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97 yo retired educator
The “She’s now become a different person” case

- Family reported dramatic overall improvement with combination:
  - Auto PAP
  - Low dose Armodafanil 50mg (cleared by her cardiologist)
- MMSE remained unchanged although now conversive, more alert and responsive.

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Lessons Learned

- False assumption that age absolutely determines CPAP compliance.
- CPAP can be effective in all age groups, including the very young and elderly.
- You don’t need to “cure” the patient to gain significant subjective and objective improvement.

68 yo male with abnormal nocturnal behavior
The “Hey, keep your dreams to yourself” case

- Fallen out of bed several times.
- Hit his head on the night stand.
- Now violent behavior several times a week.
- Acting out of dreams fighting someone to “protect his wife”.
- Punch his wife in the nose.
- Vivid dreams.
- Nightmares.
- Sleep talking.
- Insomnia, snoring.
- Depression on fluoxetine.

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68 yo male with abnormal nocturnal behavior
The “Hey, keep your dreams to yourself” case

- PSG with AHI of 0.3, REM RDI of 0.7 with min O2 of 89% with 1.2 min < 90%.
- No PLM's
- REM w/o atonia noted in > 50% of epochs.
- MRI of the brain unremarkable.
- Episodes resolved with clonazepam 0.5mg and melatonin 5mg.

Stage REM Sleep

REM Behavior Disorder

Lessons Learned

- RBD/REM Sleep Behavior Disorder
- RBD is the only parasomnia requiring a PSG for diagnosis.
- Dream enactment is NOT unique to RBD
  - OSA
  - NREM parasomnias
  - Periodic limb movements disorder
  - Seizures
Lessons Learned

RBD/REM Sleep Behavior Disorder
- Typically in men over the age of 50 yo
- Associated with Neurodegenerative Disease, i.e. Parkinson's
- Can be seen as a "pseudo" phenomenon
  - Secondary to medication effect, typically antidepressants (i.e. TCAD, SSRIs)
  - Arousals as related to underlying sleep disordered breathing.
  - An occult intracranial/posterior fossa/brainstem irregularity.

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Lessons Learned

Think MRI if:
- Younger
- New onset
- Neurologic symptomatology

Lessons Learned

Safety issues,
- Furniture
- Sleeping bag
- Spouse to sleep in separate bedroom

Rx
- Clonazepam 0.5-2.0mg
- Melatonin 5-15mg
- Avoid SSRIs (RBD not reported with Bupropion).
- Gabapentin
- Clonidine
- Carbamazepine

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Lessons Learned

RBD Alternative Treatments

Posey Sitter Elite bed alarm #8345
Service dogs

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The “first impressions are not always correct” case.

70 yo professional with too may symptoms to count

- Presents to the ER with episodes of transient neurologic dysfunction characterized by near syncope and speech difficulties and weakness.
- Presumptive diagnosis of TIA’s
- CAT scan, MRI, MRA, carotid duplex, routine labs and EKG monitoring all unremarkable
- Symptoms resolved and discharged with recommendations for out patient follow up.

70 yo professional

- Referred for sleep specialist evaluation as related to history of prominent snoring with suspected OSA.
  - Nocturnal episodes dating back to childhood characterized by palpitations, diaphoresis, anxiety, sense of terror, without disorientation or confusion.
  - Vivid dreams of impending peril, trying to fend off an attacker, awakening flailing and kicking (his wife).
  - Sleep talking/screaming with these events w/o sleep walking

70 yo professional

- Sleep paralysis dating back to childhood
- Vivid dreams with depersonalization
- EDS throughout his life with an Epworth score of 15.
- Recurrent “spells” triggered by emotion, characterized by a feeling of lightheadedness, fading of vision, word retrieval hesitancy, slurred speech, generalized weakness, “as if his body is turning to Jell-O”
- 5-10 seconds with rapid resolution.
- Typically triggered by stressful or emotional type event.
70 yo professional

- Basic labs unremarkable including TSH and B12
- HLA DQB10602 Positive
- Prior brain CAT, MRI and MRA all unremarkable
- PSG with AHI of 10.3, supine AHI of 13.5, REM AHI of 34.5 with minimum O2 of 79. Severe snoring. PLMI 53.9/40.5
- REM 21.3%, REM latency of 155.5 minutes, Sleep Efficiency of 82%, SOL 8 minutes, TST of 372 minutes
- REM without atonia with talking and movement in REM

So just how many sleep disorders can one patient have?

1) Obstructive sleep apnea
2) Upper Airway Resistance Syndrome
3) Periodic Limb Movements
4) Sleep Talking (can occur in any stage of sleep)
5) Night Terrors
   a) Slow wave parasomnia with autonomic discharge
   b) Typically no recall of event with disorientation and confusion

So just how many sleep disorders can one patient have?

6) REM Sleep Behavior Disorder
   a) REM parasomnia with dream enactment
   b) Typically with recall of event
7) Sleep Paralysis
   a) Can occur as an isolated REM parasomnia
8) Narcolepsy with Cataplexy
   - EDS, Sleep Paralysis, Hypnogogic Hallucinations, Cataplexy
   - Dreams with depersonalization
   - Automatism
   - Daytime episodes of “zoning out”
70 yo professional

- Potential treatment options:
  - Sleep hygiene
  - Safety measures (i.e. door/house alarms, separate bedrooms)
  - Avoidance of precipitants
  - Medication options
    - Melatonin
    - Clonazepam
    - Stimulant (modafinil/armodafinil)
    - SSRI/TCAD
    - Sodium Oxybate, gamma hydroxy buturate

Lessons Learned

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Lessons Learned

- A good history is still worth its weight in gold.
- Multiple sleep disorders can occur concomitantly.
- Many can mimic and exacerbate one another.
- Usually best to treat sleep apnea first
- Safety issues and risks of hypersomnolence paramount.
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