

Parasomnias:

There are many sleep disorders recognized by the American Academy of Sleep Medicine. The most common discussed are obstructive sleep apnea and narcolepsy, but there is a large group of disorders known as 'parasomnias'. This term actually refers to occurrences related to sleep. Some of the more common are :

- Sleep walking (afflicts 2.5% of adult)

- Sleep talking

- Restless Leg Syndrome (RLS) (can affect up to 70% of a genetically related group e.g. Ice Landers)

- Periodic Leg Movement (PLM).

- Sleep Bruxism

Though there is significant overlap among these diseases and obstructive sleep apnea, but they can be found as independent disease entities.

A recent paper published by a group of researchers at Stanford University studied a group of chronic sleepwalking young adults. Treatment with benzodiazepines and psychiatric-related approaches did not improve their symptoms and many of those patients dropped out of the treatment arm of the study. However, many of the subjects had concomitant sleep disordered breathing. When these patients were treated with CPAP only, their sleep breathing AND their sleep walking was controlled.

Restless leg syndrome is characterized by an irresistible desire to move ones legs when lying in bed or sitting stationary for a long period of time (airplane or auto trips). The feeling has been described as: itching, irritation, a creepy feeling in the legs, and sometimes arms, that ceases with movement. This can lead to insomnia and difficulty returning to sleep if awakened at night. RLS is often genetic and appears in family groups. It increases with aging and is often related to ferritin levels in the brain. The predominant treatment is prescription of dopamimetics such as Pergolide or Mirapex. Sometimes iron supplements are prescribed.

Periodic leg movement consists of rhythmic movement of the leg (1, 2, or 3 joints) during sleep. These movements are often seen in conjunction with sleep disordered breathing events. The sleep study will show a breathing event, PLMs , arousal and then a return to normal sleep for a time. For many people with both OSA and PLMs, CPAP will control both entities. PLMS also occur in about 80 % of patients with RLS. Some researchers consider them to be different manifestations of the same disease. When PLMs occur as an independent disease, they are treated with benzodiazepines.

Sleep bruxism appears to be controlled in the same part of the central nervous system that deals with PLMs. The movements often occur with the same periodicity as PLM, but the two movements never happen at the same time. Sleep bruxism occurs after an arousal and may be a stress reaction to the change in sleep level. Another correlate with sleep bruxism is nocturnal GERD. Researchers in Japan have looked at mild acidification of the esophagus at night, being followed by bruxism. Their hypothesis is that tooth contact reflexively increases salivary flow; saliva is filled with calcium salts that , when

swallowed, will buffer the acid in the esophagus. When nocturnal bruxers were prescribed medication designed to control acid reflux, their incidence of sleep bruxism decreased significantly.

Since obstructive sleep apnea is also related to nocturnal GERD, given the thoracic and abdominal pressure changes that can occur with a breathing event, One must stay aware of the broad reaching effects of OSA. Sleep disordered breathing is almost a “hydra”, with a ‘finger in every pot’.