

Periodic Limb Movements (PLms)–Information Sheet

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Condition:

- Events of intermittent, short, muscle contractions while asleep
- Each blockage lasts from 0.5 to 10 seconds
- Events occur between 5 to 90 seconds apart
- Events occur in series of at least 4 events. The series can be as short as four events or last for long periods of time
- Events usually fade during the night and are gone in the morning

Effects:

- Events disturbed sleep and causes symptoms (tiredness, poor quality sleep, frequent awakenings)
- Physical movement occurs in 62% with dramatic movements in 16%
- The events have a weak relationship to vascular illnesses (hypertension, diabetes, strokes, and heart attacks). This is distinctly different from apnea

Diagnoses:

- Individuals may or may not have symptoms. A majority are not aware
- Sleeping partners can observe problems. Again, majority are not aware
- Testing shows the muscle contractions and determines the frequency per hour
- Testing may allow for visualization of the physical movements observed

Causes and associated conditions:

- Unknown
- Restless legs
- Iron metabolism problems predominately low or low normal body iron levels
- Lumbar, cervical or thoracic back problems
- Nerve problems (neuropathies) and nervous system diseases (Parkinson's, others)

Testing:

- Home Sleep Apnea Testing can be not reliably be used to measure the events
- Sleep center testing (polysomnograms) can be used to measure the events, evaluate for other sleep disorders, and observe the movements

Measuring PLMs:

- The number of events while asleep is counted
- The number of events that cause brief awakenings (arousals) are counted
- The Periodic Limb Movement Index (PLMI) – number per hour - is calculated
- The Periodic Limb Movement Arousal Index (PLMAI) – number of arousals per hour - is calculated

Severity

- The severity of PLMs is rated by the number of times per hour of sleep observed
- The severity of PLMs should include an assessment of the associated physical movement. (This is not routinely done in most sleep facilities)

Goals of treatment:

- Improve symptoms – Sleep better
 - Patients are treated only to improve symptoms
 - PLMs are not treated just because they are measured
- Most people with measured PLMs do not require treatment.