

Restless Legs Syndrome: Is This a Pain Issue?

Kathy Lattavo, RN, MSN, ACNS-BC, RN-BC

Objectives

- Describe the pathophysiology of RLS.
- Evaluate treatment for RLS.
- Compare & contrast RLS & pain.

Definitions

- Restless legs syndrome (RLS): sensorimotor disorder characterized by a distressing urge to move the legs & sometimes other parts of the body
 - Ekbom's syndrome
 - Creepy, crawly or jumping feeling in the legs with an urge to move them
 - "growing pains"

Periodic Limb Movement Syndrome (PLMS)

- Sudden leg jerking during sleep
- Repetitive involuntary leg muscle contractions (“Elvis legs”)
- Jerks occur every 30 seconds during nondreaming phases

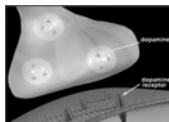


Statistics

- Affects about 12 million Americans
- 5-15% of the population
- 3% seek medical help
- Occurs more often in women
- 90% are not diagnosed properly

Causes

- ????
- Defect in dopaminergic system
- Associated with:
 - Pregnancy
 - Obesity
 - Smoking
 - Iron deficiency
 - Anemia
 - Nerve disease
 - Polyneuropathy
 - Hormone disease
 - Kidney failure
 - Drugs/medications
 - Heredity
 - Aging



Diagnosis

- No specific test
- Criteria
 - Distressing sensation deep in the legs that produces a strong urge to move the legs & is
 - Brought on by rest &
 - Worse at night or in the evening &
 - Relieved by moving or walking
- Mistaken for insomnia, sleep apnea or other sleep disorders, arthritis, muscle cramps, PAD, peripheral nerve damage or psychiatric disorders

URGE

- Urge to move
- Rest induced
- Gets better with activity
- Evening & night accentuation
 - (Henning, Allen, Tenzer & Winkelman, 2007)



Signs & Symptoms

- Irresistible urge to move the legs or arms when sitting or lying down
- Unpleasant feeling in the legs
- Difficulty falling asleep or staying asleep
- Daytime sleepiness
- Sensation begins during inactivity
- Sensation relieved by movement



Treatment

- Dopaminergic agents
 - carbidopa & levodopa (Sinemet)
- Dopamine agonists
 - Pramipexole (Mirapex), ropinirole (Requip), pergolide (Permax)
- Sedatives
 - Clonazepam (Klonopin), eszopiclone (Lunesta), ramelteon (Rozerem), temazepam (Restoril), zolpidem (Ambien)

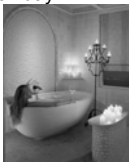
Pharmacological Rx (cont)

- Anticonvulsants
 - Gabapentin (Neurontin) & pregabalin (Lyrica)
- Pain medications
- Iron supplements



Nonpharmacological Treatments

- Avoid tea/coffee/alcohol before bed
- Sleep late & rise late
- Cool, comfortable room
- Moderate exercise during the day
- Wear long socks to bed
- During an attack:
 - Walk & stretch
 - Relax
 - Massage limbs
 - Distract mind
 - Stretch at beginning & end of each day
 - Hot baths



Case Example

- 43 year old female admitted for abdominoplasty & thigh lift
- Medical history includes
 - RLS
 - Previous morbid obesity
 - Anemia
 - Familial tremors
 - Kidney stones

Case (cont)

- Surgical history: bariatric surgery 2 years ago (lost 155#)
- Home meds
 - Ambien one tab at HS
 - B₁₂ shot every month
 - Neurontin 300 mg HS
 - Mysolin 5mg bid
 - Inderal LA 80 mg daily

Case (cont)

- Description of RLS
 - Mother & sister have RLS & familial tremors
 - Another sister has neither
 - 16 year old son has tremors
 - Has had RLS "all her life"
 - Symptoms worsened after gastric bypass surgery

Case (cont)

- “Jerking & twitching”
- “Pins & needles” in feet
- “Burning along outer aspect of L hip”
- Doesn’t get up & walk around
- Neurontin helps
- Ambien & Mirapex don’t work

Is RLS a Pain Issue?

- Pain
 - “An unpleasant sensory & emotional experience associated with actual or potential tissue damage or described in terms of such damage” (APS)
 - “Whatever the experiencing person says it is, existing whenever the experiencing person says it does” (McCaffery)
 - Latin word *poena* means “punishment or penalty”

Description of Sensations for RLS

- | | |
|------------------------|----------------------------------|
| ● Pins & needles | ● Itching bones |
| ● Aching | ● Electric shocks |
| ● Toothache in the leg | ● Legs tearing open |
| ● Throbbing | ● Cold water going down the legs |
| ● Leg cramps | ● Burning |
| ● Creepy-crawly | |
| ● Pulling | |



(Chaudhuri, Odin & Olanow , 2004)

Treatment

● Pain

- NSAIDs, opioids
- Adjuvant medications
- Local anesthetics
- Anti-spasmodics
- Nonpharmacological Rx
- Surgery
- Nerve blocks

● RLS

- Dopaminergic agents
- Dopamine agonists
- Sedatives
- Anticonvulsants
- Pain medications
- Iron supplements
- Nonpharmacological Rx

Effects

● Pain

- Suffering
- Anxiety
- Depression
- Loss of function
- Restricted mobility
- Sleeplessness
- ↑SNS response

● RLS

- Sleeplessness
- H/A
- Fatigue
- Poor concentration
- Impaired memory
- Impaired productivity
- Personality changes

Conclusion

● Pain or not pain???



Theories of Pain Management Nursing

- Maslow's hierarchy of needs
- Erickson's theory of personality development
- Piaget's theory of cognitive development



Nursing Theories

- Nightingale: environmental adaptation
- Henderson: humanistic nursing
- Orem: self-care deficit
- Roy: adaptation
- King: goal attainment
- Rogers: science of unitary human beings
- Leninger: cultural care diversity & universality
- Watson: philosophy & science of caring

Role of Pain Management Nurse

- Caregiver
- Change Agent
- Educator
- Manager
- CNS
- Nurse Practitioner
- Researcher



Pain Management Nurse

- How would you approach a patient with RLS???

Thank you!